

# AMERICAN JOURNAL OF ARCHÆOLOGY.

VOL. III.

Nos. 3 and 4.

## THE PORTRAITURE OF ALEXANDER THE GREAT: A TERRACOTTA HEAD IN MUNICH.<sup>(\*)</sup>

[PLATES XV, XVI.]

### II.

The Alexandrian age was in love with allegories and assimilations in painting and sculpture. Lucian's charming account of Aëtion's epithalamium in colors on the wedding of Alexander and Roxana,—the same of which a thoughtful judge has observed, that it is one of the few descriptions of ancient paintings graphic enough to vivify the dryness of Pliny's short notices (Brunn, *Gr. Kunst.* II, 247),—might apply almost as well to a mythological scene, with Ares and Aphrodite in the principal parts (Lucian, *Herod. sive Acton*, 4; Pliny, *H. N.* xxxv, 78). Against so many pure portraitures and compositions of an allegorical cast, but one contemporary historical painting can be cited, the work of Helena, a female artist, whose home appears to have been Alexandria in Egypt. The great Pompeian mosaic known as the Battle of Alexander has often been considered a copy of the spirited brush of this artist, and it is quite certain that it was meant for the battle of Issos, which was that which Helena had rendered. Possibly, the claims of the Battle of Alexander and Dareios, which Philoxenos of Eretria executed about 306 B. C. by the commission of Kassandros (Plin. *H. N.* xxxv, 110), might be considered with those of Helena's contemporary

(\*) Continued from vol. II, p. 413.

composition. But we know too little of either artist to judge with any competence.

The gold mummy-case in which the body of Alexander was transported to Egypt can hardly be styled an image, at least in an artistic sense; but we may note, in the elaborate description Diodoros gives of the magnificent funeral-car constructed by Arrhidaios, the fourfold painted frieze that was visible through the gilded Ionic columns and netting which decorated the mobile mausoleum. On three sides, were figured ships, cavalry, and elephants; on the fourth, which could only be the front, two groups of paladins, viz. Makedonians, and sceptred Persians with their armorers before them, surrounded their hero-king, sitting charioted, and holding the royal sceptre (Diod. Sic. XVIII, 26). In the end, Alexander's features, like Vergil's verse, became a charm for the superstitious to conjure with. A sacrificial patera with his effigy was a venerated heirloom in the family of Alexander Severus (Lampridius, *Vita Alex. Sev.* 29), and the *gens Maeria* used the head as a talisman to wear embroidered on clothing, and carry on the person in a variety of other ways.

With all this wealth of portraiture, it was reserved for modern scientific archæology, starting from one authentic but indifferent marble head, to proceed from stray and dubious identifications towards the goal, not quite attained, of a reliable classification of the extant material. It was but natural to look for the lineaments which many literary allusions caused to seem almost familiar, for the "joyous eyes and brilliant" of Solinus; for the "arched nose," not aquiline, as Frenshemius calls it in his supplementations of Quintus Curtius, but more nicely termed *ὑπὸ γυμνῶς* by his Greek original; for the "leonine" eyes and mane of the always grandiloquent Plutarch; or the "bushy hair" of Ælian's homelier phrase. A number of more than dubious busts and statues, scattered through the museums, attest the activity of those early enthusiasts, for whom any casual resemblance or coincidence was sufficient justification for cataloguing a new portrait of the most popular historical personage of antiquity. One cause that helped to swell the number of false "Alexanders" must be recognized in the notorious fondness of some among his successors for imitating his appearance, his manners, and even his deformities. Another cause was the fortuitous circumstance, that a marked physiognomic similarity exists between heads of undoubted authenticity and certain ideal conceptions of a mythologic nature, as treated by the

leading artists of the Hellenistic age and their followers,—Helios, Herakles, Telephos, Giants, Tritons, Satyrs even.

For an authentic representation of Alexander's features, we naturally look to the gold and silver and bronze coinage issued from his own mint. An amusing blunder was that of the painter Lebrun who, endeavoring to grace his canvas with a correct likeness of his historic hero, imitated the handsome head in a Korinthian helmet which we find on the obverse of the gold staters that bear the legend ΑΛΕΞΑΝΔΡΟΥ ΒΑΣΙΛΕΥΣ—lending a more masculine quality, perhaps, to the delicate profile. In reality, the head on the coin is feminine, as an external sign, the distinct earring, sufficiently proves. The locks that escape under the rim of the helmet are those of the goddess Athena. The consideration occurs that no Greek sovereign before the epoch in question ventured to stamp his own effigy on the currency of his realm. The figures of gods, or national devices, were held a better decoration for such a purpose. Accordingly, the divinities preferred above others by Alexander are those which find a place on his coinage: Athena, on the obverse of the gold pieces; Nike bearing a wreath, palm, or trophy-cross, on the reverse of these coins; Zeus enthroned and facing to left, on the inscribed reverse of the silver pieces; the head of Herakles, apparently (wearing a lion's scalp for a hood), on the obverse, not only of the silver pieces, but also of the bronze, which have, on the other side, his attributes—club, bow, and quiver. Thus it seems but natural that, as a reaction from this too easy credulity, the careful author of the learned *Examen critique des historiens d'Alexandre*,<sup>25</sup> with Eckhel, Stieglitz, Arneth, and others,<sup>26</sup> should repudiate the notion that any portrait-lineaments can be found on the medals. Yet the evidence that they may be sought in the Herakleian profile just mentioned, which was long considered as feeble and suspicious in no ordinary degree, is rendered convincing by the latest numismatic and iconographic discoveries. It is true, the type occurs on contemporary Tarantine coins, and even on Makedonian pieces struck before the reign of Alexander. Also, the likeness of the features, as seen on different specimens, to other portraits or to each other, is often impossible to detect. In any event, it can only be supposed, with L. Müller our chief authority (*op. cit.*), that the die-engravers gradually gave a less or greater semblance of portrait-likeness to the

<sup>25</sup> BARTHÉLEMY-FIGEAC, p. 13.

<sup>26</sup> L. MÜLLER, *Numismatique d'Alexandre le Grand*: Copenhagen, 1855.

profile of what was originally a purely ideal head of the ancestor of the royal house of Makedonia.

That the later ancients, at least, recognized an effigy of Alexander on the coins of his reign, is quite certain; for St. John Chrysostom (*Ad illumin. cateches.* 2) deprecates the custom of wearing the same as amulets, as if some divine efficacy could reside in the likeness of a pagan prince. Diogenes Laërtios alludes to the beauty of Alexander's coinage in language which implies that it bore his effigy. The identical head and *coiffure* on a medal of Pisidian Apollonia with the circumscription ΚΤΙCΤΗΥ ΑΓΟΛΛΩΝιδάται is sufficiently conclusive.<sup>27</sup> Medals struck in honor of a founder do not bear the image of an indifferent god. To the query how to account for royalty appearing in so unusual a garb, the defenders of the likeness<sup>28</sup> have a ready answer. Konstantinos Porphyrogenetos says that a lion's mask was a royal insignium with the kings of Makedonia, and is for this reason found on the coins.<sup>29</sup> And that this is no mere invention of the imperial publicist is shown by the statement of Athenaios, who says that these primitive regalia were actually worn by Alexander himself. The case rests here. The notion that the head on the tetradrachms was primarily intended for Alexander must certainly be dismissed. But Müller's conclusion, that he gradually usurped the accoutrements along with a share of the veneration due to his mythical ancestor and prototype, is not untenable, and will sufficiently account for the diversity in physiognomy on the different classes of coins which correspond to successive mintages; for the variations in the types are accompanied by alterations in size, etc., such as justify Müller's chronological classification in at least seven distinct series. It was thus that Commodus assumed the title and garb of a *Hercules Romanus*.

After Alexander's death, coins with his effigy and superscription continued to be struck. A tetradrachm, for example,<sup>30</sup> which a dimin-

<sup>27</sup> VISCONTI, *Iconographie grecque*, s. v. *Alexandre*.

<sup>28</sup> MÜLLER enumerates Visconti, Cadavène, Cousinéry, Ch. Lenormant, Duchalais, Pinder, O. Müller, and Birch. Among the earliest was LE BLOND, *Du vrai portrait d'Alexandre le Grand* (*Mém. de l'Acad. des Inscriptions*, an v).

<sup>29</sup> *De Thematis*, II, 2 = διὸ καὶ ἀντὶ ταινίας, καὶ στέμματος, καὶ πορφύρας βασιλικῆς τῷ δερματι τῆς κεφαλῆς τοῦ λέοντος ἑαυτοὺς ταινιοῦναι κτλ.

<sup>30</sup> In Müller's plate, the head of Alexander seems substituted for that of Zeus Aëtophoros on the reverse. The lineaments are unmistakable, diminutive as the figure is, and such an alteration would be after the analogy of the obverse; but Prof. Rhusopolos, of Athens, to whom the writer is greatly indebted for facilities accorded to study his

utive palm-tree and the monogram AP designate as having been struck at Phoinikian Arados, bears in its exergue the date "Year 40" in Phoinikian characters. The era is that of the conquest of the Phoinikian coast by Alexander, or 332 B. C. Year 40, then, is 292 B. C. The occurrence of such dated coins, in the early days of numismatic science, induced certain antiquarians to assume for Alexander's reign a length altogether at variance with literary tradition. Not only did autonomous states, like Kos, Arados, Odessos, the Aitolians, and Smyrna, Lemnos, Mitylene, Phokaia, Miletos, Chios, Rhodes and others, on the recovery of their autonomy in 190 B. C., continue to strike money of the Herakles-Alexander type, as that belonging to the principal circulating medium,<sup>31</sup> but the conqueror's princely successors also exercised extreme caution in substituting their own portraits for his. The personal coefficient, however, except when the old types remain unaltered, becomes more pronounced, whether it be found in feature or in attribute. A striking series is that in which the familiar profile looks forth from under the scalp of an elephant instead of a lion. Here a diadem confines the luxuriant locks that rise from an indented forehead, under the conventionalized trunk and tusk; a tiny ram's horn protrudes from beneath and shows itself under the shrivelled skin; like the scaled aegis and knotted serpents seen below, this is the distinctive attribute of the son of Zeus Ammon.<sup>32</sup> The reverse exhibits an Athena Promachos of archaistic design, in the field an eagle on a thunderbolt, the badge of Ptolemy I Soter, the same that will later occupy the whole reverse of his portrait-stamped medals. As long as Ptolemy governed in the name of Alexander IV, the son of Roxana, he seems to have coined money in the name of that prince. Accordingly, we read nothing but ΑΛΕΞΑΝΔΡΟΥ on these pieces. But there is one notable exception in the unique tetradrachm of the "Cabinet des médailles." On it we read the peculiar legend ΑΛΕΞΑΝΔΡΕΙΟΝ ΠΤΟΛΕΜΑΙΟΥ. Perhaps, then, after all, the Ἀλεξάνδρου of the others refers to the Alexander, whose name had become almost an inherent feature of the currency, and was so employed up to more than a hundred years later, as we have seen above. Ἀλεξάνδρειον would be simply the name of a coin, like *napo-*

rich numismatic collection, thinks that the engraver was misled by the abrasion of the beard on the specimen that served him for model.

<sup>31</sup> See Mr. HEAD's observations in his *Guide to the Principal Gold and Silver Coins of the Ancients*, p. 87, and under pertinent numbers of the catalogue.

<sup>32</sup> A fine enlargement of this medal is given in Mr. STILLMAN's article on *The Coinage of the Greeks*, in the *Century Magazine*, vol. XXXIII, p. 797.

*l'ion or louis d'or*. The piece of the "Cabinet des médailles" may have been struck in the interval between the death of Alexander Aigos (311 B. C.) and Ptolemy's assumption of the title and prerogatives of sovereignty (306 B. C.), but name and portrait belong to the great Alexander. With such a specimen in hand, it needs no attentive comparison of mint-marks to do away with the old idea that the elephant-scalp stater belonged to the coinage of some other Alexander, such as the contemporary king of Epeiros, or poor Ptolemy XI. Lysimachos, like Ptolemy, retained the portrait of Alexander, but with characteristic alterations: his are the staters and tetradrachms with the head of Alexander, deified, with diadem and horn of Ammon, and a seated Athena Nikephoros on the reverse.

Among other early royal portrait-medals of the Hellenistic age, those of Demetrios Poliorketes, diademed and with the bull's horn growing from his forehead, most closely attach themselves to those that bear the portrait of Alexander himself. Hieron II of Syracuse readily assimilated the innovation of the Makedonian princes, and the custom of putting forth currency under the likeness of the sovereign soon became traditional and general. Pyrrhos, in whom the Hellenic spirit lived on, was faithful to the Hellenic traditions in this respect. None of his coinage bears his likeness.

The beauty of the Hellenistic portrait-medals enables us to give but a passing notice to the use of Alexander's head as a monetary device by the Romans, on their Makedonian currency of the first century B. C., and under Alexander Severus.

### III.

There is little difficulty in grouping most of the extant reproductions of Alexander's features according to their affinities with one or other of the celebrated portraits known to antiquity, or with the medals. The only one that has his name attached to it has served in some sort as a standard by which to try the authenticity of less certain busts and statues. This is the bust found at Tivoli in 1779, acquired by the Chevalier d'Azara, then Spanish Ambassador to Rome, and when he became ambassador of Spain at the court of France presented by him to Napoleon, and now in the Louvre. The character of its inscription,

ΑΛΕΞΑΝΔΡΟΣ  
ΦΙΛΙΠΠΟΥ  
ΜΑΚΕ//

as also that of its technical execution, marks it as of the time of Augustus. All freshness and inspiration are absolutely wanting, and the piece is further defaced by restorations about the nose, mouth, and shoulders, and by the marks on the marble surface occasioned by a bath in sulfuric acid. Yet in its detail it tallies with the descriptions of the original physiognomy: in particular, the leftward turn of the head is there, with the enlargement of the side of the face opposite the affected muscle which frequently accompanies cases of *torticollis*. Perhaps it will be safe to credit the original of this bust to one of the unsuccessful rivals of Lysippos.<sup>33</sup>

The figure of Alexander in a relief of the Albani collection that represents his meeting with Diogenes the Cynic is as good as inscribed. He stands seminude, wearing a helmet, while the philosopher sits, disrespectfully, beside his cracked jar or tub. As the figure of the king is entirely due to a restorer's hand, it is without any archæological value.

Winckelmann was acquainted with a porphyry bust, not likely to offer any special interest, and further mentions two busts, about the character of which there has been much contention, and both of transcendent sculptural excellence: the once radiated head of the Capitoline Museum, otherwise known as a Sol Oriens,<sup>34</sup> and the "Dying Alexander" of the Uffizi Gallery at Firenze.<sup>35</sup> Two complete statues, replicas of one type,

<sup>33</sup> First published by VISCONTI, *Iconographie grecque*, under *Alexandre le Grand*. The most accessible cuts of the better-known portraits of it will be found in BAUMEISTER, *Denkmäler des klassischen Altertums*, s. v.

<sup>34</sup> *Stanza del gladiatore*, No. 3; I subjoin the catalogue notice from the official *Nuova descrizione del Museo Capitolino*: "Alexander the Great: head. The lineaments of the face correspond with the hermes in the Louvre Museum; but it has a considerably more ideal expression. The head is inclined a little to the left, and the gaze is directed upward as in a serene rapture. Its long hair rises above the forehead in a fashion resembling that of the images of Zeus. Seven drilled holes about the crown of the head probably served for the insertion of metal rays; hence it has been assumed that the king was represented with the attributes of the Sun-god. This and other analogous portraits of Alexander are considered copies after originals by Lysippos, inasmuch as we know him to have been variously portrayed by this famous Sikyonian master alone. Greek marble. Preservation excellent. Only the tip of the nose and the neck of the bust are restored. The back is left in the rough. Foot of bigio immacato. Height 0.78 m." He has whiskers, and the characteristic tusk-shaped lock on the right cheek. What looks like a wart above his left eyebrow is the point of a lost curl. The marble-drill was much employed by the sculptor of this bust.

<sup>35</sup> On the connection of this piece with the Giant Frieze from Pergamon, now in Berlin, the reader is referred to a paper by the writer in the *American Journal of Philology*, vol. iv, pp. 204-7.

now respectively in Paris and München, were also known to him.<sup>36</sup> The treatment of the subject and figure is thoroughly Lysippian. Absolute nudity finds its occasion in preparation for athletic sport. The general has doffed his armor and clothing to anoint his body with oil, in accordance with the practice of the palaistra. His draped tunic is carelessly thrown over a cuirass stood beside him. Balancing the weight of a sturdy body on his left leg, he has set his right foot on a rock, the more easily to rub the bent leg above it with an unguent. A vessel from which this has been poured is held firmly in the left hand. Not quite absorbed in so mechanical an action, the hero is free to direct his interested gaze straight before him. Is he watching the play of athletic companions? Is he scanning the ground about him with the topographical eye of a soldier? Or is the external vision but the shadow of an inward visualization. Thus Poseidon leans and looks, on the coins of Demetrios; thus Demetrios himself gazes into the distance, in the bronze statuette from Herculaneum. These are closely related types. The like attitude of Herakles over the fallen lion on the first Olympian metope is more remotely kindred. There is a suggestion of the unrestful rest of Ares Ludovisi in the ethos of this only statue of the conqueror that has been preserved to us. Its portrait-value must be considerable. An uninjured nose—always a subject of congratulation in Greek or Roman statuary, as well as a great rarity in the small array of authentic Alexanders—is not the least interesting feature of the München replica; from it we learn the sense of that precisising physiognomic definition of it as *ὑπόγυπτος*, or *subaquiline*. The hair falls backward and to the shoulders in customary leonine richness, with a depression all around the crown as from the constant wearing of a fillet.

The characteristic thus designated is distinctly absent in two busts recently coupled in a monograph by Bernhard Stark.<sup>37</sup> At the first blush, the head from Count Erbach's collection (found in Tivoli towards the close of the last century, like the Paris hermes) recalls the much-discussed *Spinario*.<sup>38</sup> Curls entirely conceal both ears, not being brushed back as in the majority of the heads; on the contrary, they cover the skull naturally without giving the face the mask-like appearance com-

<sup>36</sup> Identified as a portrait of him, through comparison with his medals, by Visconti. See BAUMEISTER, *Denkmäler*, s. v. *Demetrios*.

<sup>37</sup> *Zwei Alexanderköpfe, Festschrift der Universität Heidelberg zum 50 jährigen Jubiläum des deutschen archäologischen Instituts in Rom: Heidelberg, 1879.*

<sup>38</sup> Both are given in BAUMEISTER, *Denkmäler*.

mon to many of the other portraits. Whatever individual features are there, are tempered by a youthful roundness and softness that imparts an unequalled charm to this novel rendering of Alexander's countenance. The faintest enlargement appears in the right sterno-cleido-mastoid, showing that the head was once turned leftward. A restorer has not noticed this. The eye-sockets are deep (τὸ λεοντῶδες τοῦ προσώπου). A thin upper lip is most delicately drawn up on both sides of a central point, exposing a portion of the teeth. This peculiarity is more marked than usual. Stark—who recognizes in this bust (which was originally, as shown by the iron dowel found planted in it, part of a complete statue) affinities to the Lysippian and Praxitelian types of Zeus, Eros, and Ares—is inclined to connect it with the chryselephantine statues dedicated in the Philippeion at Olympia, and consequently with the work of Leochares. The other is the well-known head in the British Museum. It has the arrangement of the hair, the peculiarity of the mouth, and the faint suggestion of the slight deformity in common with the other. A feature here alone given with such a degree of emphasis, is the overlapping of the *orbicularis superior palpebrarum* over the nether at the external commissure of the eyelids. The nose is conventionally straight; the cheeks hewn in larger and more vertical planes than customary. The trace of a metal diadem is visible in the hair. If the Erbach head gives us a purely Hellenic type of the *μελλέφηβος*, according to Stark's formulation, the progress achieved from that head to this older one is in the direction of mastery of the new elements introduced with a half or wholly barbarian type. The striking resemblance to the conquered German prince known as Thumelicus, the son of Arminius, in the British Museum, cannot be entirely fortuitous.<sup>39</sup> There is an unrecognized portrait-bust in the Capitoline Museum, once without reason held to represent Arminius himself, which strongly suggests another likeness of the youthful Alexander.<sup>40</sup> The same collection furnishes three more

<sup>39</sup> The head is given in BAUMEISTER, *Denkmäler, s. v. Barbarenbildungen*.

<sup>40</sup> "Stanza dei filosofi," No. 59. "Bust of an unknown personage. The long hair falls waving over forehead and ears, which last it entirely covers. The face is not absolutely beardless; a faint down is visible about the upper lip, the lower portion of the chin and cheeks. The eyes, with their pupils indicated, have an expression of passion and anger. The type of the countenance partakes of the barbaric nature, and led some archaeologists to recognize a portrait of Arminius, the famous conqueror of Varus, in this bust. Others have tried to recognize in it the rhetor Apuleius of Madaura in Numidia. The shoulders and bare breast are done in a picturesque style

examples either of portraiture, or of conscious imitation of the given portrait-type, all gathered, curiously enough, in the same "Stanza dei filosofi." The writer would severally designate them as a very inferior portrait,<sup>41</sup> as one of the Diadochi,<sup>42</sup> and as a princely or athletic type largely modelled on a recollection of some Lysippian head of Alexander.<sup>43</sup>

The probabilities are that numbers of sculptured heads of Alexander still await the observation of archaeologists in private collections. The writer was recently acquainted with the existence of one among a collection of antiques on its way from Rome to Frankfurt-am-Main, and learns of another of which he subjoins a description from a private letter.<sup>44</sup>

There is a certain affinity both in conception and circumstance between the principal figure in the great mosaic from the "Casa del Fauno" in Pompeii, now in the Museo Nazionale at Naples,<sup>45</sup> and the

full of effectiveness. Greek marble. Nothing restored but the tip of the nose. Height 0.73 m. Found in the vicinity of Naples." The eyes are directed to the right and upwards.

<sup>41</sup> "Stanza dei filosofi," No. 26. "Male hermes, once supposed to be the portrait of Apuleius of Madaura, but without reason. The beardless face presents a youthful aspect, the long and thick hair rises parting on the forehead and, covering the ears, altogether drops upon the neck. The lineaments are without semblance of portraiture, but rather suggest an ideal personage (Helios?). Greek marble. The nose is restored, the hermes foot is entirely modern. Height 0.59 m." To this add, that there is a channel for a fillet-diadem in the hair, and that the workmanship is execrably poor.

<sup>42</sup> "Stanza dei filosofi," No. 1. "Hermes of an ideal personage (Apollo?). Formerly this hermes was thought to represent the poet Vergil; but the ideal lines of the face, and the abundant hair that flows in ringlets that cover the temples and ears, have nothing in common with a Roman portrait. The head is bound with a fillet; cheeks and neck are sculptured with great elegance. Luna marble. The tip of the nose, the chin and some pieces of the neck are restored. The foot is put together and worked over, but antique." The familiar deformity is imitated in the neck. A head of similar character found during M. Homolle's excavation in Delos, was recently published in the *Bulletin de Correspondance Hellénique* as an example of the craze of the Diadochi for resembling the outward appearance of their great archetype, but M. Reinach, in a recent paper in the *Gazette Archéologique*, regards it as an Alexander.

<sup>43</sup> "Stanza dei filosofi," No. 28. "Colossal ideal head, once falsely thought to be the portrait of Alexander the Great. It inclines to the left. The half-open mouth and the upward gaze give much expression to the face, &c., &c. Height 0.51 m. Discovered at Priverno in 1839."

<sup>44</sup> "One of the finest things in Baron Baracco's superb collection of Greek sculpture in Rome is a colossal bust of Alexander, in marble and of fine art, probably of the III century before Christ. The head is bent to the side and slightly upward: the head is lion-like and the expression misty and far-reaching. It is a thorough chef-d'œuvre."

<sup>45</sup> Found 1831, and placed in the pavement of the fifth hall or "Stanza della Flora."

small bronze, early recognized by the learned academicians of Herculaneum for a copy from the equestrian battle group by Lysippos.<sup>46</sup> The mosaic is admittedly copied from Helena's contemporary picture of the battle of Issos. Alexander, mounted on a prancing charger, and in a general's panoply, but helmetless, has just transfixed a Persian noble with his long Makedonian spear, or sarissa. His countenance is viewed in profile, or nearly, the left eyelash appearing behind the high-bridged and straight nose. The brown hair is mane-like, the brow somewhat drawn, the eye brown and wide-open; mouth and chin recall the coins; the skin is not white, but quite sun-colored; the cheek is framed by a brownish whisker, as in the Capitoline bust. A tunic sleeve covers the right arm. A sword hangs by a short baldric on the left side of the cuirass.

The Herculanean bronze likewise represents the man on horseback and in armor. The helmet is again missing, this time perhaps in allusion to an incident in the fight on the Granikos. The King's helmet had been rendered useless by the stroke of a Persian scimitar. Instead of the spear he holds a short sword, using it not *punctum* but *caesim*, as a Vegetius would tell us—not thrusting but hewing with the edge. In this vigorous action of the right arm and reaching to rightward of the whole body, the rider being without stirrups, his left leg is well advanced, while his right swings back from the knee to a nearly horizontal position. Exactly the same position has been noted by M. Salomon Reinach in a terracotta replica found in a koroplastic collection from Smyrna;<sup>47</sup> the body of the rider is unfortunately destroyed in the replica he describes, but the circumstance is enough to show that this and the Neapolitan bronze are reduced copies from one and the same celebrated work. In still more reduced proportions a similar figure appears on the reverse sides of two magnificent gold medallions from Tarsos, among the treasures of the "Cabinet des médailles:" their technique assigns them to the domain of numismatic science, and the circumstances of their discovery to the age of Commodus. In this case the rider is attacking a lion with his spear. The writer is not aware that anyone has yet thought of connecting this figure with that other composition of Lysippos, the Lion-hunt. The central figure of the Hunt would then have been selected by the copyist from among

<sup>46</sup> Museo Nazionale, No. 4996. Found at Herculaneum 1761. A large engraving of the head is given in VISCONTI's *Iconographie grecque*.

<sup>47</sup> Catalogued by M. REINACH in the *Mélanges Graux*.

its companions, just as the corresponding one was from the *turma equitum*. Other replicas exist to corroborate this view. The emperor Commodus himself is delineated in the same equestrian attitude, attacking a lion, on a cameo shown to the writer in the same collection, and on another observed by him in the Museo Nazionale at Naples.<sup>48</sup> Indeed, the celebrated Vatican statue of Commodus, which served as a model for Bernini's Constantine the Great in the portico of St. Peter's, is also an obvious imitation of the Lysippian original.

The gold medallions of Tarsos repeat another of the royal portraits already noticed, on not a reduced but an enlarged scale; this is the Herakles-Alexander of the tetradrachms. It is therefore but natural to suppose that a second splendid profile found on one of the medallions, and which needs no attributes to serve as the key to its evident individuality, is likewise derived from one of the notable contemporary likenesses. The lines and expression of the face, indeed, and also the pose of the head and neck as well, suggest the Lysippian type; but a certain radial rather than leonine disposition of the hair tempts to new conjecture. Few medallion-heads fit and fill the limits of a circle half so well. The analogy of the companion piece permits the supposition of enlargement from a small original, say a coin, or, since no coin of this type is known, an engraved gem. We know only one engraver whose work would have been likely to serve as a model for so costly a replica as the Tarsos medallion. But, waiving speculation as to the originator of this artistic type, which can in no case be entirely dissociated from the school of Lysippos, may it suffice to say that it is so worthy of the material in which it is embodied as to stand emphatically supreme among the extant portraits so far enumerated.

Could a higher iconic importance be assigned to any other, the special subject of this sketch, a small terracotta in the Royal "Antiquarium" at München, were the only rival with a claim to be considered. Its high excellence, indeed, is the justification of its presentation in this Journal, a careful collation with the original, by the writer, having satisfied him of the entire inadequacy of the copperplate outline in a previous publication.<sup>49</sup>

The Director of the Royal "Antiquarium" kindly permitted a photographic reproduction of the terracotta in question, from which the

<sup>48</sup> No. 58 among the precious stones; the same collection contains some unimportant engraved heads of Alexander—Nos. 121 and 1024. No. 155 is modern.

<sup>49</sup> LÜTZOW, *Muenchener Antiken*, plate XXXI.

phototype plates that accompany this article were made. Unfortunately, the process has reciprocally changed the sides of the face, so that in both plates the reader will see rather a mirrored reflection, as it were, than the proper delineation of the original. The proportions are those of the antique itself. It measures 0.143 millimeters in height, including the restored plinth, or, excluding it, 0.131 m. The piece was acquired by King Louis I of Bavaria, along with a female head of the same character, and very probably by the same hand (No. 387 a), from the Roman sculptor Fogelberg, as stated by Lützow. No further information on their provenance can be elicited from the archives of the "Antiquarium." The Rhodian origin conjectured by Lützow rests on internal evidence. Both heads were modelled without bodies; for the bases of the necks are tooled, not broken, and it does not appear likely that they were ever attached. What seems part of a garment adhering to the back of the neck, in the one presented, is a portion of the cascade of unbroken locks that once covered this part. Both heads exhibit, with the same adherent particles of whitish calcareous substance, the same plentiful vestiges of a red pigment, not confined to any particular division of the surface, but such as to show that the entire head and face were colored bright red. Lützow made out a difference of light and darker hue, which the writer could no longer distinguish; but it is possible that the hair contrasted with the skin-surface, burnt sienna against vermilion, to suggest, heraldically, as it were (as the fashion of antique polychromy oftenest was), the proper tinges of chestnut and carnation. Both heads are of a like boldness of characterization, and a sketchiness of execution that carries with it a breath of moist studio air. On close examination it will be found that they are not retouched mouldings, like most antique terracottas, but original models, nor too carefully finished at that. It will be observed that no such threads disfigure the surface as remain on moulded specimens; that the hair abounds not only in undercut edges but also in aduncous or ansate locks: both of which features would greatly impede taking a cast from it, for example. Further, a trained eye will notice that a large portion of the hair is hardly more than thrown up; the furrows are made with a round-pointed stick, apparently the same whether for so small a scoop as that over the right eye, or for the long rill that runs entirely around the head as if to receive a fillet. One of the individualizing features consists in the parallel tusk-like locks that adorn the right cheek: the breakage shows that they were laid on after the

modelling of the face was completed to smoothness; a few scratches remain as traces of the erasure of such a lock deemed superfluous by the artist, and which would evidently have interfered with the outline of the face. Finally, we have the very touch of the sculptor's finger, or rather thumb, one dexterous twist of which was sufficient to shape the expressive forms of the eye. A diagonal striation across this organ and its socket, plain enough in the original, and observable even in the photograph, is imprinted by the pressure of the papillae.

All these particulars of technique, together with a most forceful boldness of conception and characterization, make us accept without hesitation what appeared certain to Lützow, viz.: that we have before us an original by a consummately skillful Greek sculptor of that Hellenistic age which attained to mastery in the expression of pathetic emotion. If Lützow goes further, and specifies the Rhodian school, we may suspect that nothing but the conspicuousness of a great masterpiece of that school suggested so confident a determination. We now know that Pergamon and other centres of Hellenistic art were fully capable of analogous successes, and the gradual rise of the pathetic element has been traced back to periods that were purely Hellenic.

We shall experience no hesitation, if its portrait character shall appear evident, in regarding a work of so pronounced an originality as having come from the studio of some master of the very first order of ability, a contemporary of Alexander. That it is an original sketch, or sculptor's first model, is the opinion of the Director of the Antiquarium, and this view has suggested itself spontaneously to almost every person of cultivated eye to whom I have shown the photograph.<sup>50</sup>

The identity of the subject admits of no question. We discover in the clay image every traditional physiognomic feature of the patron of Lysippos and Apelles: the leonine mane, the indented forehead which archaeologists have denominated the Lysippian, the clear vision combined with a strange softness in the expression of the eyes, the terrible countenance whose anger quelled a mutiny, the subaquiline nose of a word-weighting biographer, the skyward glance of the epigrammatist, and its cause in the slight deformity of the neck. Yet, although we may recognize these features, although we may even detect such elusive

<sup>50</sup> The companion piece, the head of an elderly woman wearing a bitter expression (Olympias?), belongs to the same category, not unexampled, I think, among extant antiques. I have learned of but one other terracotta Alexander, a small head in the possession of Prof. A. L. Frothingham, jr.

resemblances to the best among the known portraits as, *e. g.*, the curious overlap of the superior orbital *orbicularis palpebrarum* above the same muscle's lower segment, which is apparent to an exaggerated degree in one of the youthful heads published by Stark, the mind still requires some intentional indication by the sculptor of the nature of his subject. Nor is such an indication wanting. To some it may perhaps appear rather conventional and external, being no other than the semicircular groove or channel about the hair, roughly imaging a fillet. A fillet is the distinctive feature, in like manner, of the d'Azara bust, and is rendered also, as a groove, in a small glass one at Florence.<sup>51</sup> In the numismatic domain, we first find it on the Ἀλεξάνδρεια with elephant-scalp struck by Ptolemy Soter, and afterwards on that coined in his own effigy, and on the tetradrachms of Hieron II of Syracuse. Alexander was the first occidental prince to employ the fillet as an emblem of royalty; for the *διάδημα* he used was but of woollen woof. If the essential simplicity of this insignium was congenial to Hellenic taste, its origin was Oriental, and its use the legacy of the Persian Darcios to his successor. It was a marvel of textile art from the loom of a cunning Babylonian artificer. Alexander wore it habitually. One day as he was boating on the waters of Babylon, a gust of wind took off this priceless fillet with his hat, which presently sank. But the riband, floating lightly on the air, stuck among the reeds that grew close to an island shrine. A sailor swam for it and placed it on his head to keep it dry until he reached the royal barge again. Arrian tells of how the Babylonian soothsayers advised the bloody removal of one who had worn Alexander's diadem, and of the princely reward that the King

<sup>51</sup> This head lies in one of the cases of the "Museo Etrusco." It bears the number 3984. I was not able to ascertain its provenance, or whether it has been recognized for what it is. Its dimensions are quite small (h. 0.065 m.), and the material may possibly be rock-crystal, although the breaks show no lamination. The main fracture is at the junction of neck and shoulders. The surface is polished. The nose is partly broken off, but not so as to leave its outline sufficiently certain. The forehead is indented, the brows drawn, the eyes raised, the mouth half-open with sunk corners, the chin round but prominent, the throat full, the muscles of the neck uneven, the whole head a little awry. The hair rises from the forehead and falls down at the sides like a mane, covering the ears. Three tusk-locks line the left cheek. The fillet-cincture of the head was double, two grooves running round at a slight interval from each other. Altogether the head resembles our terracotta most closely, even to the roughness of finish in its detail. The general effect differs as one expects a work in hard material to differ from one in soft material.

gave him instead.<sup>52</sup> The equestrian statue at Naples exhibits this arrangement of the hair, then, only by an historical prolepsis.

Of a more intrinsic and puzzling nature than this external attribute is the sorrowful expression in connection with the upward and slanting direction of the eyes, in the drawn brows and the falling corners of the mouth. The fallen Giants of the Pergamene altar-frieze wear the same expression as indicative of physical agony. In the famous head of the Uffizi gallery, copied from one of the figures in that composition,<sup>53</sup> the same sets of muscles are drawn and relaxed. The difference is one of degree. What in the marble proceeds from bodily suffering, in the terracotta assumes a milder character. It is indeed known that Alexander's latter days were disturbed by a thorn in the flesh, a constant pain in the back of the head such as is known to accompany or to precede paranoia in certain cases. This is the explanation suggested by Lützow. But it is not necessary to resort to it. The insatiable, restless passion of conquest was enough to color the whole expression at times. The artist has seized on such a moment. Emphasis of the emotional aspects of the human countenance was the phase sculpture was passing through. The prominence of such a work as the Laokoön group, at a period not long subsequent, is what led Lützow to think of a Rhodian origin for our little bust.

Brunn has selected and analyzed the famous Vatican bust of Glaukos as a characteristic specimen of this tendency.<sup>54</sup> The aimless sadness, which finds expression in that splendid piece of sculpture, accentuates itself in less contained works, as in this Alexander, to a tension of the features sufficient to be taken as an indication of great physical suffering. From the extraordinary and unexplained resemblance of its features to those we have learned to recognize in the portraits of Alexander, a large triton's torso from Tivoli, in the Vatican Museum, the better serves to prove this thesis. But for its animal ears, the head of this piece might well be taken for the royal portrait itself. The expression of the triton's countenance is that of our bust. Less absolute, but nevertheless highly remarkable, is the portrait-resemblance noticed by Lützow in the sea-centaur carrying off a nymph, in the "Sala degli animali." Here, where an earlier age of art would have given the features an expression of coarse and triumphant hilarity more obvi-

<sup>52</sup> *Anabasis Alexandri*, I, 44.

<sup>53</sup> BLUMNER, *Archæologische Zeitung*, 1880, p. 162.

<sup>54</sup> Westermann's *Monatshefte*, 1885.

ously consonant with the situation, we have in the triton the same appearance of distressful suffering. In this case it obviously results, not from bodily pain, but from the straining spiritual tension of an unsatisfied, craving sentiment. Both tritons have, with the features of the royal portrait, the sorrowful upward cast of the eyes so noticeable in our terracotta, and observable, as Brunn has shown, in the Glaukos. The sentiment that pervades the mild features of the marine deity is the tender melancholy of an unobjective yearning. One can only suspect its amorous quality. Such an emotion would be too divorced from reality, perhaps, for such rude fellows as tritons, who are but marine satyrs, to experience. The emotion is occasioned in one by the inattainability, it would appear, of the object of his desire, in the other, by the unresponsiveness to his rough affection of that object, the struggling nymph in his arms.

The solution I would offer, to account for the strange resemblance between the actual likenesses and ideal embodiments of mythological conceptions, is the simplest possible. The individual type, once firmly grasped, became a common artistic property, which could be used to embody any idea that could be made to find expression through it. One of the prime achievements of Greek sculpture, in the age of the successors of Alexander, was the intelligent portrayal of barbarian ethnic types. The portraiture of Alexander himself, as of a prince of barbarian race, and of a conformation of skull very different, without loss of beauty, from the traditional straight-nosed pure Hellenic type, offered the same problem. Once solved, the type was employed for such subjects as the foregoing, where a certain un-Hellenic rudeness belonged to the nature of the conception: this rudeness belongs likewise to the Giants of the great Pergamene altar-frieze, many of which are so many posed Alexanders, and a copy of one of which has long been taken for the royal likeness it at once is and is not. Whether the large torso in the Louvre until recently known as Inachos<sup>56</sup> be really that river-god, or an unrecognized portrait of Alexander, as M. Reinach has endeavored to show, it gives us a good example of the actual or possible interdependency of the individual and the ideal in a similar field. This strange phenomenon, the reiterated employment of individual features in ideal creations, has sometimes been traced in the work of single artists. Its

<sup>56</sup> No. 253; in the "Galleria delle statue." No. 228.

<sup>57</sup> *Gazette Archéologique*, 1886, Nos. 7-8, pl. 22.

form in this case, the reappearance of a subject fairly exhausted by the portraitists in the undreamt disguise of a river-god, a sea-centaur, or the like, is unique in the history of art. After all, however, it is but a manifestation of the surviving force of that earlier artistic spirit which Alexander personally did much to break. To lend a prince the attributes of deity, the bolt of Zeus or the nimbus of Helios, was cheap flattery and weakness of imagination. The passing of Alexander's personality into the domain of the mythology of art is a process diametrically opposed to this, and purely Hellenic.

I desire to express my grateful obligation, for the facilitation of researches required in the preparation of this article, to the authorities of the Royal Bavarian *Antiquarium*, of the Paris *Cabinet des médailles*, and of the Italian museums in general, and my thanks in particular, for valuable assistance and suggestions, to Professors W. von Christ, F. von Reber, H. von Brunn, of München, to MM. E. Babelon and M. Prou, of the *Cabinet des médailles*, finally, not least, to Professor A. L. Frothingham, jr., the Managing Editor of this JOURNAL, and to my brother, Mr. George H. Emerson, who superintended the work of photographic reproduction.

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PAINTED SEPULCHRAL STELAI  
FROM ALEXANDRIA.

[PLATE XVII.]

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Sepulchral stelai with various representations sculptured in relief have been recovered from ancient sites in such numbers that there is scarcely a collection of importance which does not possess examples: but, from the nature of the case, it is hardly to be expected that similar painted representations would descend to us in equal numbers, even if they had ever been employed with the same frequency. Painting is too evanescent to become a favorite where a lasting memorial is desired, unless it be used as mere decoration for sculpture, as we know was often the case. It is conjectured that the Attic stele of Aristion originally had a scene painted below the carved figure of the warrior; but the conjecture rests wholly upon the similarity presented by the Lyseas stele, found in its immediate neighborhood, upon which both the standing figure and the galloping horse below were simply painted: their presence was not even suspected till some time after the stele had been unearthed, when they gradually made their appearance under Loeschke's persistent and well-directed efforts. The rarity of these paintings from Attika may be seen from the fact that in 1884 M. Pottier could refer to no more than 18 upon stelai and funerary urns (*Bull. Cor. Hellén.* No. 8, p. 459; cf. *Mith. des arch. Inst. Athen.* iv, p. 36 seq.; v, p. 164 seq.; x, pp. 238-50, 328-33). Of these, only two or three belonged to the sixth century, the others to the fourth, or later.

The interest that is naturally excited by objects so few of which are known, has led me to make known to archæologists a series of stelai which do not possess the value of Attic origin, it is true, but are, nevertheless, of considerable importance from the place and period to which they belong, and from the nature of their discovery.

In an article published in the first number of this Journal (vol. 1, p. 18), under the title of *Inscribed Sepulchral Vases from Alexandria*, I described a tomb found among others at a depth of twenty to thirty

feet beneath the surface, near the sea, about a mile east of the present limits of Alexandria, Egypt. These tombs were "partly cut in the solid rock, partly built up. One that was discovered about a year ago had a rock-chamber 12 to 14 feet square, and contained as many as fifty vases, about thirty of which were in a good state of preservation and bore a few inscriptions. Beside the vases, this tomb contained also 'a number of tablets, with paintings badly preserved, and a few inscriptions.' These inscriptions are Greek. Nothing was found in the vases but ashes and small pieces of charred bones, and they were all tightly sealed with plaster when found. These vases are said to be of a poorer quality than those of the Puglioli collection. They are in this country, but still unpacked and I have not been able to see them. In July, 1883, in another tomb at the distance of a few rods from this tomb a vase was found containing a hoard of over 200 silver coins, all of which are declared to belong to the period of Ptolemy Soter and the early part of the reign of Philadelphos, according to the classification made by Mr. R. S. Poole of the British Museum."

A large number of these coins, as well as the contents of the tomb described, were secured at the time by Hon. E. E. Farman, for several years American Consul-General in Egypt, who visited the tomb, saw many of the objects removed, and brought the most important of them to this country. His large collection of coins, Egyptian bronzes and scarabs, together with six of the painted tablets above referred to, have been loaned to the Metropolitan Museum of Art in New York, and have been on exhibition there for some time. Other painted stelai, beside these six, were found disposed about the wall of the tomb, but their condition was so bad that it was thought not worth while to transport them hither. The six are of a lightish-yellow, fine-grained, calcareous stone, closely resembling that from Kypros. Their front surfaces are rather carefully smoothed, but all the others are roughly chiselled into shape, as if they were intended to be set against a wall, as they were found. In shape they resemble the ordinary sepulchral stelai, that of the Attic Hegeso for instance, with pillared front, architrave, pediment and three akroteria. Five out of the six bear inscriptions; one shows no trace of any. Of three of these inscriptions enough remains to show that there were apparently buried here at least three members of a corps of Galatian mercenaries, in the service of the Ptolemies, who occupied, with their families, a part of this Eastern nekropolis, which was devoted to them and similar military corps.

The names would indicate a mixed origin. The period to which the tomb belongs should not be far from that of its near neighbor where the hoard of coins was found; it probably was of the first half of the third century B. C., an attribution sustained by the forms of the letters (*A. J. A.*, vol. I, p. 31). Whatever Egyptian element there may have been in this group, the art and accessories of the stelai are Greek. It is not high art, it is true, and the general effect is greatly marred by time and accident; but there are some evidences of good drawing and fine characterization. The colors are in part fairly preserved, with some evident fading in the lighter shades, especially the blues. As in the case of the painted vases described in the article referred to above (*A. J. A.*, vol. I, p. 19), the colors are laid on a stucco-ground with which the stone is covered for the purpose, and in general the same methods may be said to have been employed in both. The stelai may be described as follows:—

I.—(PL. XVII) The outside measurements are,—width, 10 ins.; height, 15; thickness, about 3; panel within, 8 to  $7\frac{1}{4}$  by 10, sunk  $\frac{1}{2}$  in. The space at top between the akroteria is sunk  $\frac{1}{2}$  in., the rest is left uncut. The pediment is painted red, the geison with a rough ornament of red and chocolate. The architrave bears a single line of inscription in red:

..... A A — H C

Within the panel (whose whole field is painted a dark lead color), to the right, stands a man,  $8\frac{3}{4}$  ins. high, clothed in a chlamys of bright blue fastened on his right shoulder and falling below the knees. The exposed parts of the body, face, neck, right shoulder and arm, left hand, portion of right side and leg below knee, are painted a lightish-brown or flesh color; the eyes and mustache are black, as is also the hair. Paint about the head has disappeared in spots, especially in the hair, leaving bad outlines. The right hand is outstretched to receive a cup presented by a young warrior to left,  $7\frac{1}{2}$  ins. high, standing with spear reaching to top of field to left, partly concealed by body. The spear is black, as likewise the hair and eyes of the warrior, whose pure Greek forehead and nose are admirably executed: the eye deserves the same encomium. The hair is short and, in the main, well defined. The exposed parts of his body are of a dark brown, many shades deeper than that of the other figure. He is clad in a chiton which appears only by a corner above and behind the knee, all the front of the body being covered by a huge oval shield resting on the ground, before his right

foot, while the upper part rests against his chest. The main body of the shield is painted a dull blue, decorated toward the upper part by three more than semicircular lines of red, and the same on the corresponding part below. The centre of the shield was yellow, and there are remains of what was probably a Gorgon-head in black. The outstretched forearm of the warrior projects beyond the edge of the shield, as he offers to the deceased a two-handled black cup with a very long stem. That the first figure is the deceased is shown by his greater stature, in accordance with the usual custom of heroising the dead, and also by the presentation of the wine-cup as an offering to the hero. The old Spartan reliefs and the Lyseas stele represent the deceased as holding the cup, with the libation just received or to be received; typical, it would seem, of the yearly offerings to the dead (*cf.* Isaïos, 2.46-7, 9.36; Gardner, "A Sepulchral Relief from Tarentum," *Journ. Hel. St.* 1884, pp. 105-42). In some of the Boiotian reliefs the libation is being poured into the cup (*op. cit.*, p. 119). It is interesting to see the present stage of the scene coming to us from Alexandria.

II.—Outside measurements,  $16\frac{1}{2}$  ins. by 10; panel, sunk  $\frac{1}{2}$  in., 7 to  $6\frac{1}{2}$  by 7. The akroteria are cut free and painted blue; the pediment is red; the geison has a coarse ornament, as in No. I. The architrave bears two lines of inscription in red:

..... ΙCΙΔΩΡΟC  
..... ΓΑΛΑΤΗC

The field of the panel is painted yellow, and bears, to the right, the deceased, 6 ins. high, with reddish-black hair, habited in blue chlamys, as in No. I, with flesh tint of about the same shade. He reaches out his right hand and clasps that of a woman,  $4\frac{1}{2}$  ins. high, whose hair and eyes are reddish-black, the hair reaching to her shoulders. The front of her garment is of a dark brown, but on her right the arm and garment to feet are of a roseate pink. Behind her is a woman, of nearly the same height, extending her right hand upward toward the deceased, in farewell. Her hair and eyes resemble those of the first woman, her dress from neck to feet is pink, with a wide stripe of light blue from the girdled waist to the knees, and with brown stripes below and in front. Some long lines in blue and brown, above the heads of the women, may be shaped, dubiously, into ΙΑΙ, the barbarous exclamation of sorrow in Soph. Fr. 54. The whole work is coarse and careless, but there is some spirit and even expression in the face of the second woman, while the faces of the others are badly injured.

III.—This measures, outside, 16 ins. by  $11\frac{1}{2}$  to  $10\frac{3}{4}$ : the akroteria are merely blocked out, as in No. I, and painted blue; the pediment is red. The architrave bears one line of inscription in red, completely preserved:

ΒΙΤΟΣ ΛΟΚΤΟΙΕΚΟΓΑΛΑΤΗΣ

Βίτος Λόστοιεκ ὁ Γαλάτης

Upon the yellow ground of the panel is represented the single figure of a warrior, so badly preserved that it is difficult to make out all the details, but he seems to be standing "at rest," holding erect, in his right hand, a long spear, resting it on the ground, and with his left hand his oval shield in like position, upright and free from his body, with the edge toward the spectator. The shield, as in No. I, reaches as high as his neck. The size of these shields is noticeable. The head of the warrior is badly injured, but there are some remains of brownish hair. His chlamys is blue, and the flesh is rather brown.

IV.—This stele measures 16 by  $10\frac{1}{2}$  ins.: its pediment has a cornice and mouldings wider than the preceding, but otherwise is similar in form and decoration. The architrave exhibits some faint traces of letters, but not enough to form into words. The main part of the pinkish ground of the panel is occupied to the left by a reddish-brown unbridled horse, which has thrown up its head and the fore part of its body, as if to free itself from the grasp of a man in front who has his left arm thrown around the neck of the horse, and his right hand lifted to seize him by the nostril. The horse stands  $4\frac{3}{4}$  ins. high at hip, and is  $7\frac{1}{2}$  long to tip of nose. The man,  $6\frac{3}{4}$  ins. high, is youthful, clad in a short chiton of yellowish-white material, girded with a dark sash in which is stuck what appears to be a knife or stick, and on his head, over reddish-brown hair, he wears a rounded conical hat. His flesh tint is swarthy, but not so dark as that of the cup-bearer in No. I. His profile, neck, and general attitude are excellent. Behind him stands a smaller male figure,  $5\frac{1}{2}$  ins. high, clad in a similar chiton, looking at the scene before him: his hair is blacker than that of the other. The attitude of the horse is very lifelike, and the head is drawn with much spirit: the ears are laid back, and the eye shoots out a vicious fire. One is reminded of the Alexandrian horse described by Theokritos in the *Adoniazousai* (xv. 53), ὀρθὸς ἀνέστα ὁ πυρρόος· ἰδ' ὡς ἄγριος.

V.—The measurements are  $29\frac{1}{2}$  ins. by 19, and 5 ins. thick. This stele differs from all the others in having 4 ins. of the lower end cut down to fit into some support which should hold it upright. The colors

of the upper parts resemble those of the other stelai. On the architrave the remains of an inscription are still visible:

..... ΘΑΥ ....

The panel presents a scene of *δεξιωσις* including three persons. On the right stands a woman,  $11\frac{3}{4}$  ins. high, whose hair is black and short, but whose skin is of a light lemon color—lighter than any others in the series. A white garment falls with graceful sweep from shoulder to ankle, leaving the right arm bare, as also the left from the elbow, which rests in the folds of the mantle: her shoes are red. She extends her right hand and clasps that of a person seated on a chair without a back, whose height, as seated, is 10 ins. The hair of this second figure (or rather the space where the hair was) is a bright blue, the lips and ears red, the skin a light brown. A straw-colored garment covers the body from the neck to below the knee. The feet rest on a stool decorated with red, and some pink appears on the seat, behind which stands a third figure,  $11\frac{1}{2}$  ins. high, with right hand resting on the side of the sitting figure. The head has been badly rubbed away, and the surface of the stone destroyed. The right arm, much of the shoulder and breast, and the lower legs are exposed, showing a brownish skin: the garment is dark purple. In this stele alone does the ground of the panel exhibit two colors: all about the first figure, as far out as her extended arm reaches, it is of a deep lilac tint; the rest is very much lighter. From their garments, figures 2 and 3 would seem to be men.

VI.—This stele is 29 ins. by  $16\frac{1}{2}$ . It has no inscription visible, and is the only one in which the columns have any capitals: they are here painted red, with a band of blue, an inch wide, below. The background of the panel is of a bluish tint. The scene consists of three figures. The central figure is apparently a woman,  $10\frac{1}{2}$  ins. high, as seated, facing to the left. Her body is wholly supported by an attendant, who stands behind, and her left arm hangs limp and powerless by her side, as if in the throes of death, with only enough strength remaining to clasp the hand of a figure standing before her. Her proportions are full and massive, and her body, naked to the groin, has indications of full breasts. Much of the scene is sadly blurred, but it appears to me to represent death in childbirth. Her skin is of a lightish flesh tint: about her hips rests a light lilac garment, and over her knees a reddish one: her shoes are black. Only dim features of the head can be distinguished. The attendant behind her, 10 ins. high,

has black hair, and a dark garment extending to the waist: below the girdle the white chiton is disclosed in a broad stripe, like an apron. The third figure, in front, 11 ins. high, is too badly injured to be described further than as wearing a light-brown garment.

The Museum of the Louvre contains three similar stelai, in the room devoted to Pompeian frescos. They are from Sidon, and have been described by Clermont-Ganneau, *Stèles peintes de Sidon* (*Gazette Archéologique*, III. 1877, pp. 102-115). In all the technique of manufacture they resemble ours closely, but they are coarser and less Greek, especially in the pedimental structure. They are supposed to belong to the Roman period. A few others found at Sidon are figured by Renan, *Mission de Phénicie* (p. 380, pl. XLIII).

Of the vases above mentioned as belonging to the Alexandrian tomb, those that were inscribed appear to have been broken into fragments, and I can only give the following as copied by Signor Pugioli in Alexandria:

ΘΗΡΑΙΔΑΣ	ΦΙΛΙΠΠΟΣ	ΑΠΟΛ
ΘΗΡΑΙΟΣ	ΜΑΚΕΔΩΝ	ΛΩΝ
	ΠΕΡΙΞΤΕΡΑ	

It is easy to see that the tombs in which these stelai were found are those of Greek mercenaries in the service of the Ptolemies, and their families. The men represented in the paintings are warriors, and the tombs are to the east of the city, where the foreign garrison was placed. In this case, the deceased were Galatians, as we see from the inscriptions, and, as the Galatian corps was especially numerous in the reign of Ptolemy Philadelphos, this fact would seem to confirm the inference drawn from the coins as to the age of the tombs. This group would then be slightly earlier than the hypogeum whose inscriptions are given in the last number of the *Revue Archéologique*<sup>1</sup> by Neroutsos-Bey: the latter belong also to the Greek mercenaries, especially Kretans, and date from the close of the third and the first half of the second century B. C. From the slight indications in the *Revue Archéologique*, it would seem that several of the stelai, on which are the inscriptions there published, were painted like those here illustrated.

<sup>1</sup> Mai-Juin, 1887: M. NEROUTSOS-BEY, *Inscriptions Grecques et Latines recueillies dans la ville d'Alexandrie et aux environs.*

NOTE.—I take advantage of the opportunity to correct a statement made in the article on *Inscribed Sepulchral Vases from Alexandria* in this Journal (vol. I, p. 19). In speaking of the painted vases, I said, "Another bears a Medusa's head with wriggling snakes, supported on the left by a helmet with eagle's head as crest, on the right by a cuirass." For "eagle's" head, read *griffin's*, which it undoubtedly is. In this respect, the helmet resembles that of the tetradrachms of Philip V of Makedon (Baumeister, *Denkmäler*, p. 952, *Abb.* 1102), but otherwise it is differently shaped and is not winged. The Medusa-head and griffin doubtless refer to the descent from Perseus, claimed by the Makedonian royal family. I observe that Mr. Head, in his *Historia Numorum* (London, 1887, p. 205), describes the helmet of the Philipian coin as "ending at top in eagle's head." But the hornlike projections of the head, on the coin as well as the vase, are too prominent for the eagle.

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## THE BOSTON CUBIT.

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In the Way Collection of Egyptian Antiquities, Museum of Fine Arts, Boston, Mass., is an old cubit measure of the XVIII dynasty. It is a scribe's or artist's palette of wood, length 15 inches, width  $1\frac{1}{8}$ , thickness  $\frac{1}{2}$  inch. On the face, at one end, are three incisions for paints about one inch square. In the middle is a slot, undercut for the brushes. The edges of the paint-cups show much wear from use. Unlike some half a dozen others which lie beside it, one edge is scored with lines running crosswise at irregular intervals, apparently cut for the artist's convenience in measuring his work. I have carefully compared these intervals with the standard cubit as determined by Sir G. Wilkinson and Mr. W. M. F. Petrie, and the double-line scored cubits preserved in the Turin and Louvre Museums.

The Turin cubit is . . . . . 20.611 inches.

The Louvre cubit is . . . . . 20.591 "

The Nilometer cubit (Wilkinson) is . . 20.625 "

The Gizeh cubit (Petrie) is . . . . .  $20.632 \pm .01$  "

The Turin and Louvre cubits are divided into 28 digits numbered from right to left. At the 15th digit a single line extends across the face of the rule, at the 24th digit a double line; thus dividing the rule into three unequal parts, a right hand section of 15 digits, a middle section of 9 digits, and a left hand section of 4 digits. But each of these 4 is longer than a digit at the right of the double line; strictly speaking, these 4 are not digits, but make the palm or hand-breadth of the cubit.

The value of the Boston cubit as a witness of the Egyptian standard of measures rests in the fact that its scored lines give the three principal divisions of the Turin and Louvre rules: viz. the hand-breadth, the middle or 9 digit section, and the right hand or 15 digit section. The first scored line on the Boston rule, at the handle end, is  $3\frac{1}{8}$  inches from the end and marks the hand-breadth. The second scored line is  $6\frac{3}{8}$  inches from the end and marks the 9 digit section. The space between these two lines is 55-16ths or  $\frac{1}{8}$  of 20.625 inches. On the opposite end

of the palette a 2 digit space is scored off, also a 6 digit space. Three times the 2 digit space equals the 6 digit space, and one and one half times the 6 digit space equals the 9 digit space. The 9 and the 6 combined make the 15 digit measure of the Turin and Louvre rules. The 6 and 9 digit measures give a standard digit .72916 + inch. The full cubit 20.625, less the hand-breadth 3.125, gives a standard digit .72916 +, for the 24 digit section. A standard cubit constructed by the divisions scored on the Boston rule would be:

The hand-breadth . . . .				3.125	inches.	} 20.625
24 {	9 digit section	. . .		6.5625	"	
	9 " "	. . .		6.5625	"	
	6 " "	. . .		4.375	"	

The actual length of the Boston rule is  $15\frac{1}{3} \pm .01$ . Taking .72916 as a standard digit, the palette is equal to 20.625 digits, that is, it represents by its full length the standard cubit on the scale of one digit to an inch, while by its scored lines it gives the standard divisions of the full cubit, viz., the hand-breadth, the middle or 9 digit measure, and a 6 digit measure or one quarter of the 24 digit section. One other scored line marks a quarter digit.

The evidence is decidedly in favor of the opinion that the scored lines on the Boston rule are exact, according to the standard cubit of Gizeh as determined from actual measurement by Mr. Petrie, and the Nilometer cubit as measured by Sir G. Wilkinson. Although the scored lines may have been cut by the scribe or artist who used the palette, the harmony of the divisions indicates that they were cut by the standard cubit. It may justly be inferred from these facts that the Boston rule, being in exact agreement with the cubit of Gizeh and the Nilometer, is older than the rule of Turin or of the Louvre, if indeed it be not the oldest known cubit measure in existence.

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EGYPTIAN ORIGIN OF THE IONIC CAPITAL  
AND OF THE ANTHEMION.

[PLATES XVIII-XXIX.]

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**THESIS.**—I. The Ionic capital is of Egyptian origin, being derived from a conventional form of lotus. Lotus forms on Kypriote vases, compared with Kypriote Ionic steles and capitals, offer the related demonstration. The Assyrian Proto-Ionic is derived from Egypt.

II. The anthemion and the Greek palmette are developments from Egyptian lotus motives. Demonstration from vases of Rhodos and Melos.

III. The Rosette is a distinctively Egyptian lotus motive. Demonstration from the monuments and from botanic forms. The Assyrian rosette is derived from it.

IV. An Egyptian lotus-palmette precedes the Assyrian palmette, which is derived from it. The original form is a combination of a voluted lotus with the lotus-rosette. Demonstration from Egyptian transition motives.

V. The Assyrian "Sacred Tree" belongs to a cult in which the lotus plays a part, and is a lotus "tree."

VI. The "egg and dart" and "egg and leaf" mouldings are derived from an Egyptian lotus border. Demonstration from Kypros and Naukratis.

VII. The geometric triangle motives of the archaic Greek vases, and of their Phœnician predecessors, are lotus derivatives. The geometric quadrangular designs of Kypriote vases are sometimes rhomboids derived from geometric aspects of the lotus, and sometimes are formed by various combinations of lotus triangles. With rare exceptions, if any, all floral forms of the early Greek vases are lotus derivatives, and the Mykenai spirals are probably of the same origin.

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I was led to the results announced in this paper, some of which are probably novel, by Mr. Clarke's essay on "A Proto-Ionic Capital from

the site of Neandrea" in Vol. II, No. 1, of the *American Journal of Archaeology*. This essay contains an exhaustive review of the literature of the Ionic Capital up to date, and offers a valuable basis and starting point for observations throwing new light on the origin of the Ionic Order. The authorities there summarized unite in considering certain Assyrian reliefs as pointing to an Assyrian origin of the Greek Ionic capital. The view, held by Semper, which considers the volutes of the Assyrian palmette to be the starting point of the volutes of the Ionic, seemed ultimately confirmed by the capital from the site of Neandrea, and by its connection with the palmette-volute designs of the ivories from Nineveh, illustrated by Mr. Clarke. The observations which I have to offer do not antagonize an influence on Greek art of the Assyrian Proto-Ionic, but they lead us to consider its influence as purely secondary and reactive, and oblige us to look to Egypt for the origin of both Greek and Assyrian Proto-Ionic forms.<sup>1</sup>

For many years I had been familiar with forms of the lotus-flower (PL. I, Nos. 1-5) on certain Kypriote vases which offered such striking analogies with the outlines of the Ionic capital that I could but suspect a connection between the two. Mr. Clarke's essay led me to examine the relation more closely.<sup>2</sup> In the necessary examination of the literature on Kypriote art I found that, without reference to these vase designs, Georges Colonna-Ceccaldi had already suggested that the Ionic capital was derived from the lotus. The suggestion occurs in relation to a Kypriote stele (PL. I, 11) in an article of the *Revue Archéologique* (vol. XXIX, p. 24, 1875) on the sarcophagus of Athienau republished in Colonna-Ceccaldi's collected essays—*Monuments de Chypre*—a posthumous publication. He suggests that the volutes of this stele found with the sarcophagus represent petals of the lotus, and that the introrse scrolls represent the stamens.<sup>3</sup> In a subsequent

<sup>1</sup> It is possible, however, that Syria developed that particular transitional form of the original Egyptian motive which has left its mark on the triangle or triangles placed between the volutes of certain Kypriote steles and capitals: this will be presently specified and considered.

<sup>2</sup> It was not however till the close of July, 1887, that I began the observations recorded; the necessary and related studies have been made in the following two months. Doubtless many references have escaped me, and observations in works not accessible till the moment of going to press show that abundant additional demonstration of the positions taken may be offered.

<sup>3</sup> "Un motif de chapiteau qu'on retrouve bien souvent et qui n'est autre que la traduction architecturale de la fleur de lotus. Ici, les pétales sont représentés par

article of the *Revue Archéologique* (vol. XXXIII, p. 176, 1877), *Une patère de Curium*, he suggests that the intermediate triangle of this stele represents the ovary, but that triangles in other capitals may represent petals. In this latter case he does not say what the volutes would represent.<sup>4</sup> These suggestions of Colonna-Ceccaldi, made in a discussion about the bark of Isis, attracted no notice even from authors who have frequently quoted his writings, like Chipiez, *Origines des Ordres Grecs*, Perrot and Chipiez, *Chypre, etc.*, who are among the authorities quoted by Mr. Clarke.<sup>5</sup> Colonna-Ceccaldi's erudition and conscientious exactitude of description have made his writings quoted authority, but his results in matters of interpretation have never made their way into standard works. Hence we understand the indifference of the authors noted to these suggestions, made casually without elaboration and without proof, in essays devoted to other subjects. His intuition was correct, in the present instance, as to the connection between the Ionic capital and the lotus, but his interpretations were erroneous, except in the point relating to triangles and the petals, and here by the suggestion that one triangle represents the ovary, and that the volutes also represent petals, he had weakened his case by supposing that similar forms might represent dissimilar things.<sup>6</sup> We shall see that the volutes of the Ionic are derived from the down-turned leaves of the lotus calyx

les volutes, les étamines s'élancent jusqu'à l'abaque, et le pistil est remplacé par deux Sphinx affrontés, mis là sans doute pour symboliser la double énigme de la fécondité et de la conception.

"L'ordre ionique, l'ordre aprotique par excellence, dérive de là très probablement—Cf. les chapiteaux Chypristes du Louvre."

"Par exemple on voit que la barque, recroquevillée aux deux bouts, n'est en somme que la réunion de deux étamines de lotus à grandes volutes . . . ; l'ovaire est figuré sous forme de chevrons superposés, la pointe en haut, deux, quatre ou six, et refermant dans leur sinus un bouton de fleur renversé (?) (*sic*) seul ou accompagné du croissant, aussi renversé et dans la cavité duquel est le disque solaire. Sur six chapiteaux de Golgos toute-fois, des chevrons gravés au trait et divisés par couples me paraissent représenter les pétales de la fleur de lotus."

<sup>4</sup> For those who are familiar with Colonna-Ceccaldi's writings it is not necessary to observe that his Oriental studies and sympathies prompted him to a systematic use of symbolical interpretations in matters of Kyprite art which are quite at variance with the tendencies of Greek art, as well as sometimes at variance with the rather mercantile mythology of Phœnician traders, and consequently unavailable at the points where Greek art touches the Oriental.

<sup>5</sup> Colonna-Ceccaldi's symbolizing methods are characterized by his suggestion as to the concentric rings on Kyprite vases, which he considers designs in perspective of a female breast: *Monuments de Chypre*, p. 279.

(fig. 1), and that the petals do not curl downward like the calyx leaves. In the stele noted and in similar steles there is no evidence to connect the upper portion with the stamens of the flower, and there is considerable evidence to the contrary. This upper portion of several Kypriote steles is a late Phœnician modification of a form subsequently to be explained. At all events these steles are only a Kypriote survival of Proto-Ionic forms subsequent to the actual development of the Ionic capital. The sarcophagus of Athienau with which fig. 11 was found is not earlier than 500 B. C.

A much more formal, explicit, and extended announcement of the Egyptian and lotiform origin of the Ionic Capital was made by M. Marcel Dieulafoy in his work *L'Art Antique de la Perse*, (III<sup>ième</sup> partie, *La Sculpture Persepolitaine*, pp. 34-55). This work, which appeared in 1885, is more recent than anything published on the Ionic Capital, excepting Mr. Clarke's essay, and preceded it so directly that his failure to refer to it is easily explained. I am not aware that the views of M. Dieulafoy on the Ionic Capital were made known by reviews of his book: they did not come to my notice until my paper was ready for the press. M. Dieulafoy takes for his starting point that form of Egyptian Capital which is figured at PL. IX-4. He supposes the volutes of the Ionic to be developments from lotus petals represented as curling downward under pressure from above. The central portion of the design is interpreted to represent the ovary.<sup>7</sup>

The view taken corresponds in elementary points to that announced by Colonna-Ceccaldi. After the lotiform origin of the Ionic Capital is universally accepted, the interpretation of individual details would probably not be considered a matter of vital importance. Pending this universal acceptance, it is desirable to present an interpretation which compels it and makes it necessary. On this account, I shall return briefly to M. Dieulafoy's interpretation after my own has been offered. These scholars were led intuitively to a correct result and, starting from this result, they offered the most available interpretation of an ultimate conventional form. On the other hand, if we start from the natural form of the flower itself, as it is represented on Kypriote vases, it appears as if a more convincing demonstration can be obtained

<sup>7</sup> "En posant au-dessus de la fleur un abaque rectangulaire les pétales s'écrasèrent, se retournèrent légèrement sur eux-mêmes et laissèrent apercevoir, en s'ouvrant, l'ovaire placé au centre de leur corolle. Entre la corolle et la tige se distinguaient les enveloppes foliacées du calice;" p. 39.

—one which defines the result not only as a fair probability but also as an unquestionable fact.

The actual relations of the lotus flower to the Ionic capital are indicated by designs on certain Kypriote vases in the Metropolitan Museum of Art, which are said by the Museum catalogue of pottery to come, generally, from the neighborhood of Ormidia (PL.\* I, 1-5), and by others in the Lawrence-Cesnola Collection, published by Alexander di Cesnola (*Cyprus Antiquities*, photos. 10 and 11): see also his *Salaminia*, p. 255, fig. 242. Certain Kypriote vases, on which the lotuses with volutes appear, have been published, turned in such a way as to conceal the flower on the neck of the vase (Perrot and Chipiez, *Cypre*, p. 699). Aspects of the down-turned and downward curling calyx leaves are seen on the Kypriote vase published by Ohnefalsch-Richter (*Jahrbuch d. arch. Inst.*, 1886, pl. 8). I do not know what the European Museums may offer, but the similarity of the vases with designs showing the curled calyx leaves to the rest of the Græco-Phœnician pottery of the New York Museum makes it probable that any collection of Kypriote vases might exhibit similar examples.<sup>8</sup>

For students to whom the lotus flower in actual growth is not available for comparison the easiest reference is to the design in the French *Description de l'Égypte; Botanique*, pl. 61, but this design, republished in Perrot's *Égypte*, p. 577, does not show the down-turned calyx leaves, as I have been able to observe them in all varieties of the Egyptian lotus—white, blue, and rose-colored,<sup>9</sup> which are cultivated in

<sup>8</sup> Two vases showing the lotus flowers with calyx-leaves in volutes, were roughly and inaccurately published in colored drawings by LENORMANT (*Gazette Arch.*, vol. VIII, pl. 14, p. 97), as being in the New York Museum. It does not appear that Lenormant had seen the originals. Two of the New York vases published by DUMONT et CHAPLAIN show the lotus volutes (*Les Céramiques de la Grèce propre*, p. 200, fig. 42, p. 203, fig. 45). The lotuses of these are better figured in this paper, PL. I-1, 5. The text of Lenormant's notice, about half a page in length, does not specify the designs as being of the lotus; he says "Les ornements consistent en fleurons d'un style tout asiatique." The related text of Dumont et Chaplain uses the words "decor floral" (p. 201) and "décoration qui est mêlée d'éléments végétaux et géométriques" (p. 202), but does not specify the flowers as lotuses. The wonderful examples of the "Sacred Tree" on the vase published by OHNEFALSCH-RICHTER in the *Journal of Hellenic Studies*, vol. V, p. 102, will come under later consideration (PL. XI-16).

<sup>9</sup> The rose-colored lotus is now extinct in Africa. It continues to be found in Asia.

\* N. B. The references made, in the text, to the PLATES illustrating this article are to the number within the PLATE, which is that of the article-series, viz., I-XII: the numbers over the PLATE, which are those of the Journal-series, XVIII-XXIX, are not referred to in the text.

the fountain-basin of the park in Union Square, New York (*fig. 13*).<sup>10</sup> In the examples I have observed, which show this peculiarity, these calyx leaves are well separated from the petals of the flower when in vigorous bloom but have frequently only a slight downward curve in strong flowers, and they do not generally appear in those partly open, which is the usual Egyptian aspect on the monuments.<sup>11</sup>



FIG. 13.—*Lotuses in Union Square, New York.*

<sup>10</sup> The common white pond-lily, which offers a close resemblance to the lotus flower, does not, like the Oriental and Egyptian varieties, rise above the surface of the water on an erect stem, and consequently in resting on the water does not show the down-turned calyx leaves.

<sup>11</sup> A few rapid examinations have convinced me that the phases of the down-turned calyx leaves are numerous. My impression is that all lotuses show this aspect in the later stages of bloom. On two occasions, when I observed the lotuses in Union Square, several flowers showed the calyx leaves in horizontal projection, clearly separate from the flower, as seen on the vase of the Lawrence-Cesnola Collection, in the eleventh plate, 2d vase, 3d line, without quite as much curl at the tips: they might

In the Kypriote designs (PL. I) the central petal is emphatically larger than the others in the open flowers, undoubtedly for decorative reasons or as the result of decorative habit. In some cases, for instance PL. II-5, the form is so schematic and the petals are so reduced in number that, observing the volutes and the enlarged central triangle as the most obvious features of the design, we have no great difficulty in connecting the form with certain Kypriote steles and capitals filling the rest of the plate.

Some allowance must be made for the extra conventional quality naturally belonging to forms in stone. It will be observed in the lotus flower of PL. II, as in the related form of PL. I-4, that the oblong shape of the panel on the vase from which it is taken has caused the expansion of the volutes on the sides and the depression of the intermediate petal triangles. The same tendency would exist in using this aspect of the lotus as a decorative motive for a capital used as a support under pressure. PL. II-1 will then be obviously an aspect of No. 11, if the upper part be removed. Fortunately we are not

be defined, also, as corresponding to those shown on the right hand flower published by OHNEFALSCH-RICHTER in the *Jahrbuch d. arch. Inst., loc. cit.* On the first day of our artist's visit he could find no flower showing this appearance, except the one on the left of the illustration (fig. 13) as drawn. When I went with him, on a second occasion, the only flower showing the phenomenon was the one in the centre of the plate, of a white European variety. In fig. 13 the leaves of the rose-colored variety, rising above the water, are drawn in smaller proportions and on shorter stems than in nature—in order not to increase the size of the cut. The leaves of the white and blue Egyptian variety float on the water. The seed-pods of the rose-colored variety, on the left of the cut, offer the true explanation of many so-called papyrus designs. The lines seen on the pod correspond to those of PL. VI-14, supporting a lotus bud. Variant forms of VI-14, are seen on Egyptian paintings, dotted on top with spots to represent the seeds and their cup-shaped receptacles. This observation has been made by Prisse d'Avennes, who seems, however, to accept forms corresponding to VI-14, as papyrus. Another series of forms commonly mistaken for papyrus are simply lotus flowers in conventional outline. Compare VI-5 with VI-4. It is well known that the natural papyrus is not to be studied in Egypt except in the gardens of one or two private cultivators, which are not open to travellers. A natural example seen in Bordentown, New Jersey, where the Egyptian lotuses also grow, shows the papyrus to be a feathery broom plant (see also cut in PERROT, I, 579). Prof. Allan Marquand, who has been in Egypt, and has visited the papyrus stream near Syracuse, generally quoted as the only spot where the Egyptian papyrus can be now seen, shares my skepticism as to the supposed papyrus capital, and his convictions on this point anticipated my own. PERROT, *Égypte*, p. 582, abandons the hypothesis of Mariette as to the papyrus and the campaniform capital, but does not concede it to be a lotus form. The campaniform capital is proved to be a lotus form by the lotus stele supporting a Horus in ROSELLINI, vol. III, pl. XXI. See also the lotuses of the lotus

obliged to depend on the external resemblance between the more simplified lotus form in the capital No. 1 and stele No. 11 and the pictures of the vases. Two intermediate connecting links are also links in the chain of proof. One of these is a Kypriote stele in the New York Museum, where the large volutes and intermediate lotus petals are associated in the stone carving (No. 2). The other is a stone capital, figured in Colonna-Ceccaldi's *Monuments de Chypre* as a "Dessin inédit" found among his papers after his death. It is indexed with the single word "Dali," followed by a mark of interrogation (No. 8). As the measurements are marked on the original drawing we must presume this capital to have an actual existence, but its present location does not appear. It may be in the Louvre. A Kypriote capital analogous to No. 1 is illustrated in Mr. Clarke's essay (also in Perrot, III, p. 116), and in connection (p. 17) he speaks of the "disturbing triangle" eliminated by the Greek development. There is another stele like No. 11 in the New York Museum and two related ones in the Louvre (Longperier, *Musée Nap. III*, pl. XXXIII; Perrot, III, p. 116).

"tree" with Horus hawk at VIII-3. For Egyptologists it is impossible to associate Horus with the papyrus. A similar association (Isis and Horus in the lotus "tree") defines the plant form of the Palestrina patera; PERROT, III, p. 97; and this is a conclusive demonstration for the form on the Mykenai sword. Both probably represent the seed-capsule with row of seeds above. The campaniform capital is also fully explained by VI-5, as related to VI-4. The supposition of OWEN JONES (*Grammar of Ornament*, pls. for Egyptian ornament), that the overlapping leaves at the base of the papyrus stalks are represented by the decoration at the base of Egyptian columns, is rendered completely improbable and unnecessary by the fact that overlapping triangular lotus petals are a constant feature of Egyptian decoration; and his illustration of the typical "papyrus" colonette (pl. x, Nos. 10, 11) is borrowed, as regards the capital, from a representation of the seed-capsule of the rose-colored lotus.

This digression on the papyrus is important as connected with the evidence that early Greek decoration is mainly based on the lotus. If Egyptian decoration were even more generally based on the lotus than is usually supposed, the explanation is simple for this peculiar aspect of Greek art. The plants on the Mykenai sword are lotuses, and not papyrus as suggested by ULRICH KÖHLER in the *Mittheilungen Athen. Abtheil.*, vol. VII, p. 241.

Mr. Charles Edwin Wilbour, whose wide knowledge of hieroglyphics and long personal intercourse with Professor Maspéro made his opinion of peculiar value to me, was somewhat startled by the view taken of the form VI-5, but on consideration could not think of any hieroglyphic matter to the contrary. The fact that the seed-pod of the rose-colored lotus is never seen by Egyptian travellers has caused mistaken views as to many forms in color, which mistake has then extended to the forms in stone. Probably all forms like VI-14, which have rayed lines not terminating in petals, represent the seed-pod. Those with dots appearing on a rounded top certainly do.

Perrot (III, p. 116) speaks of this triangle in the Kypriote capitals as a provincial irregularity or debasement.<sup>12</sup> Longperier, who publishes No. 1 in *Musée Napoleon III*, *ibid.*, also alludes particularly to the "chevron." As a reminiscence of the lotus petals, and as connected with the large central triangle of the Kypriote lotuses of PL. I, it assumes a new and decisive significance. Although, as observed already, it continues in steles and capitals which are subsequent to the beginnings of the Greek Ionic, it should serve as a warning not to ignore a progressive movement and development through Kypros of Greek forms in the VIII and VII centuries. The art of Kypros was provincial in the V century, and subject to the reaction of the developed Greek art; but history is full of cases in which a province, once the centre of an active and progressive life, falls behind, and perpetuates only survivals of its earlier art, or yields to later or reacting influences of the art it has helped to create. In this point of view, the history of the Ionic capital, as demonstrated through Kypriote forms, may be considered a finger-post for the study of Kypriote sculpture.

I am far from assuming an exact and direct connection between the specified vase designs, or others like them, and the capitals or steles of Kypros. The study of Egyptian lotus designs shows them to exhibit at one and the same time all possible varieties and combinations of conventional and unconventional treatment, like those on Kypriote vases.<sup>13</sup> In view of the many instances of Phœnician or Syrian Ionic capitals, some undoubtedly of early date (for instance in Prof. Frothingham's essay *A. J. A.*, III, 1-2, p. 57, PL. VII), we cannot avoid considering Syria as one spot where a Phœnician architectural lotus design of related aspect was used before it passed to Kypros. The exact relations of such a Phœnician design to Egyptian originals have still to be determined. But when the Ionic volutes are once seen to be lotus volutes (compare PL. IX-3, 4 with PL. X-1, 2), the abundance of Egyptian Proto-Ionic forms becomes immeasurably great. Syrian

<sup>12</sup> "Ce qui est moins heureux, ce sont les lignes aigües du triangle, qui separent a leur naissance les deux volutes inférieures."

<sup>13</sup> For instance, we have in IX-1 a conventional lotus bud supporting a naturalistic flower and two naturalistic buds; above these is a highly conventional form marked by the triangle between volutes and overlaid at the base with lotus petals independent of the conventional form. Above this again is a capital whose upper part shows an aspect approaching the Greek Ionic and devoid of intermediate triangle, while the lower part is covered with overlaid lotus petals and decorated with asps at the sides. The varieties of similar combinations are almost innumerable.

and Phœnician Ionic forms are common, and Oriental fixity of habit makes any anxiety as to dates of individual examples quite needless.

We come now to the Assyrian Proto-Ionic, which is clearly of Egyptian origin by Syrian and Phœnician transmission. I recall the fact that only one actual Assyrian capital has been published (Place, III, 35; Perrot, II, 216); and that the forms so frequently illustrated and quoted are imitative, and in relief decoration. In the case of the Sippara-tablet capital (PL. II-4) we find the tell-tale triangle. Mr. Clarke, misled by his Greek vase design, where a rounded connection appears between the volutes (*ibid.* p. 16), assumes that this has a rounded top, "a bud of semi-circular outline" (*A. J. A.*, II, p. 13), but his own design from the tablet shows the triangle, as does the heliogravure in Ménant, *Cylindres de la Chaldée*, p. 243. On the other hand, we are now prepared to understand that the rounded form connecting the volutes on the capital of Mr. Clarke's vase is nothing but an abbreviated triangle, as we observe it to be between the petals of the "Dessin inédit" of Colonna-Ceccaldi, PL. II-8. Some instances of the triangles connected with Greek Ionic volutes may best be quoted here as called up by the vase illustrated by Mr. Clarke: for instance; the handle of a bronze mirror from Olympia given on PL. II-7 (*Olympia*, pl. XXII, vol. IV); Ionic temple on a late Græco-Etruscan relief found near Perugia, PL. II-6 (Conestabile, *Monumenti di Perugia*, LXVI, XCII).

We have still to deal with the ivories quoted and illustrated by Mr. Clarke (*ibid.* p. 10). Many ivories of the series to which these belong are well known to be of pronounced Egyptian character—possibly or probably of Phœnician manufacture. Among these ivories we find two of special interest, both of Egyptian character (Perrot and Chipiez, II, pp. 222, 535): in one of these an Egyptian figure holds a lotus stalk rising from the lotus volutes, with intermediate petal triangle (PL. II-10); in the other, we see another form of the lotus volutes and petal triangle (detail on PL. II-3), surrounded in the original by stems of the lotus bearing abbreviated lotus palmettes.<sup>14</sup> If these scrolls be connected with those on the steles of the Louvre (Perrot, III, p. 116), we have the upper portion of Kypriote stele PL. II-11. These figures in Perrot explain the so-called "Phœnician palmette," *i. e.*, the upper part of the form II-9. This is an abbreviation of the upper part of

<sup>14</sup> Compare forms on curling stems at base of II-9 with later palmette explanation.

Perrot, III, fig. 52. This again is an abbreviation of the upper part of Perrot, III, fig. 53.<sup>15</sup>

## II.

What relation do the capital from Neandrea and the ivories illustrated by Dr. Clarke bear to the observations presented? Though it be admitted that the ivories are under Egyptian influence and of Phœnician manufacture, the palmette over the volutes must still be explained. It might be supposed that, under Phœnician or Assyro-Phœnician mediation, the "Assyrian palmette" and the Egyptian lotus volutes had been combined, and that the capital from Neandrea was to be regarded as an ultimate form of a really Assyrian Proto-Ionic, which had grown out of the Egyptian, and had then independently reacted on Greek art. But there are aspects of the lotus on Greek vases from Rhodes and Melos which show this supposition to be untenable. Before comparing the lotus forms of Melos and Rhodes it may be remembered that these two islands were the most important seats of Phœnician settlements next to Kypros, after the time when the Phœnicians had been otherwise generally expelled from their settlements in Greek territories. However, many of the Rhodian vases so clearly resemble Greek pottery from Naukratis<sup>16</sup> that the Rhodian specimens in question cannot well be dated, on this and other grounds, before the middle of the VIII century B. C., from which time<sup>17</sup> Greek colonies in the Nile Delta, if not at Naukratis, may be presumed to have exercised an influence on the Greek pottery of Rhodes, and to have exported to other Greek settlements their own vases.<sup>18</sup> Let

<sup>15</sup> M. DIEULAFOY, in his lotus Ionic theory, has exactly reversed the true state of the case as regards the Egyptian capital, IX-4, by considering the volutes as petals and the triangles as calyx leaves. In this case, the triangles are an independent decoration of conventional lotus petals, without any relation to the appearance of the entire natural form. M. DIEULAFOY says of II-1 (p. 44): "Dans les enroulements du chapiteau phénicien on retrouve les pétales de la fleur de lotus; dans le triangle placé à sa base, les enveloppes foliacées du calice que des imitateurs maladroits prirent à tort pour le prolongement des volutes." At page 39 he says of II-3: "Au nombre des ivoures d'origine Egyptienne retrouvées à Nimroud se trouve une plaque où sont reproduits à la fois la fleur de lotus avec ses pétales droits et retournés, c'est-à-dire sous les deux aspects où elle se présente séparément dans la plupart des monuments." The two sentences affirm contradictory views of the central triangle.

<sup>16</sup> GARDNER in *Journal of Hellenic Studies*, VIII, I, p. 119, pl. LXXIX: and the fragments in *Naukratis I*, published by the Egypt Exploration Fund.

<sup>17</sup> See KROKER's paper in *Jahrbuch d. k. deutschen Archäologischen Instituts*, 1886. All of Kroker's results point in the direction of this essay.

<sup>18</sup> Probably this entire subject may appear in much clearer light after the publica-

it be admitted that the vases in question from Melos are earlier than this time, as their date is not yet fixed (Conze, *Thongefässe*); and the progressive relation from Kypros to Rhodos and from Rhodos to Melos (we shall see also from Melos to Attika) is not disturbed.<sup>19</sup> It is a matter of general knowledge that, in the progressive action of Egyptian and Oriental art upon the Greek, there was a development of various local schools of art, and that these, subsequently to their development, sometimes maintained the local character corresponding to an earlier style, after this had reached a higher stage in quarters more closely connected with the final centres of Greek art. Thus the Kypriote Greek pottery apparently never lost its relations to the early stage of Græco-Phœnician development. So much is this the case that Duemmler (*Mittheilungen, Athen. Abth.*, 1886, p. 259), who has given, with Ohnefalsch-Richter, most exact attention to the questions raised by Kypriote pottery, does not seek to distinguish the Kypriote-Phœnician pottery from the Kypriote-Greek. He assumes that a Greek population originally settled Kypros, when it had no fixed art types of its own, and then adopted and continued those of its Phœnician neighbors. A parallel state of affairs as regards a continuation of local styles may be assumed for Rhodos and for Melos with the following distinction. The more closely we approach the mother country, or the Greek element proper, in geographical relation, the more defined will be the Greek transformation toward the tendencies of independent Greek art in the Egyptian or Oriental form. The less the local population is subject to contact by residence with masses of foreign settlers, the less will its local art-forms show a foreign element. In the case of early Greek vases, wherever found, there are two possibilities—importation or local manufacture. It is generally admitted that the Melos vases belong to a local centre (Conze). The Rhodian vases undeniably represent, as regards the lotus flower, a more immediate relation to an original lotus form, as found on Kypriote vases, than do those of Melos.<sup>20</sup>

tion of *Naukratis II*, soon to appear. A letter from Gen. C. G. Loring, Director of the Boston Museum of Fine Arts, makes it appear that certain results offered in this paper relating to the Egyptian origin of the Greek palmette have already been reached by him from the study of the Naukratic vase fragments in Boston.

<sup>19</sup> They are presumed to be of the VII cent., as appears by reference in DUMONT et CHAPLAIN, p. 220; to articles by CONZE, *Bullettino*, 1861, p. 9; and by DE WITTE, *Rev. Arch.*, 1862, t. VI, p. 403.

<sup>20</sup> The reasons are apparent why the forms are less Grecianized; for the Greeks both of Egypt and Rhodos were more permanently subject to foreign influence at a later

In considering the various aspects of the lotus designs of Kypros, and before making comparative observations for Rhodos, Melos and Attika, we are not to forget the much earlier Egyptian lotus motives abundantly illustrated by Prisse d'Avennes (*Hist. de l'Art Égyptien*).

It has been already observed that we find in the Egyptian examples, for instance in PL. IX-1, 2, just as in PL. I, a mixture of conventional with naturalistic aspects—the same connection of more or less naturalistic designs with conventional motives which originally must have been developed after the first naturalistic designs—and we have exposed in the subsequent Kypriote, Rhodian and Melian development the method by which the lotus spirals of Egypt (PL. X-1, 2) must have originally been developed. In the same way the heart-shaped ("herz-blatt") lotus motive of the vases from Melos (PL. IV-15) occurs, in more conventional form, on the ceiling of a tomb of the XII dynasty at Beni Hassan (PL. X-7). On the other hand, the lotus designs of Kypros do not exactly resemble any published from Egypt, unless it may be in lotus borders, and there is no reason why they should. They are pictures made by local potters and are interesting in the evidence they offer as to the general methods by which a conventional design develops. The triangles (I-14, 15, 16; X-15, 16, 17; XI-20-25; XII-6, 10), with and without the little knob-shaped appendages which are ultimate rudiments of a lotus spiral (I-8-12) and which are then reapplied to designs having

time than those of Melos. The Greeks of Kypros had been permanently exposed to Oriental influences for many centuries. The native Greek element rose one point higher than the Oriental, in assertion of an independent character, but this Greek element undoubtedly exerted more influence toward the development of native Greek art, than a purely foreign influence could have done on Greek territories farther West. On this account, the Oriental Greek art of Kypros, however wanting in appearance of independent character, deserves an important place in the history of archaic Greek art. At the opening of the V century it may be conceded to have had already not only a provincial character, but also one without influence on the at that time more highly, or differently developed, art of the more western Greek territories. In the VI, VII and VIII centuries, the times of greatest prosperity and activity among the Greeks of Kypros, we have no right to consider them as we do the Kypriote Greeks of the V century when overpowered by Phœnician influences, and under sway of hostile Persians. As well judge Venice of the XVI by Venice under Austrian domination in the XIX century.

In the early part of the VI century Nebuchadnezzar's partial destruction of Tyre, at that time the dominant Phœnician city of the mother country for Kyriote Phœnicians, gave a remarkable impulse to the prosperity of the Kypriote Greeks (DUNCKER, *Geschichte des Alterthums*), which ceased with the Ionic revolt, about 500 B. C., in which they were concerned.

the independant spiral (1-1, 4), are most interesting;<sup>21</sup> so are the little flowers, with stems hanging from above the volutes, of 1-1. The stems of similar lotuses appear as filaments in another design, 1-4, and would be otherwise inexplicable if we had not this evidence.

In both Egyptian and Assyrian sculpture we have now the evidence that in natural progress the conventional form is later than the naturalistic, and this rule appears here to hold also in the history of ornament as applying to certain geometric patterns.

For the general possibilities of lotus development in almost any direction these comparisons are important; but in the comparison with Rhodian and Melian lotus patterns we have only to consider the Kypriote forms used already to demonstrate the origins of the Ionic capital (PL. I-1-5). Compare with these the lotus patterns, PL. III-1, 2, 3 (two from vases, of related character, in Salzmänn's *Nécropole de Camire*; and one from a vase in the *Monumenti inediti*);<sup>22</sup> all of which vases I am inclined to designate as of Naukratic or Græco-Egyptian style, after comparisons with fragments of pottery in *Naukratis* and with colored fragments given by Ernest Gardner (*Jour. Hellenic Studies*,

<sup>21</sup> Transitions to the rounded appendages of PL. I-9 are seen at 6, 7. 1-10 shows the step to the knob of 1-4 by "action in return." The knobs and the rounding lines about them of 1-14 elsewhere disappear, leaving a geometrical triangle, as in 1-17. PL. I-15, a lotus upside down, forming part of a border of the neck of a vase, is a step toward 1-15, 16. PL. I-20 shows a phase of triangular decoration of the last stage but one from a lotus design. There is only one more stage; it may be observed in the Lawrence-Cesnola photographs and is very common in the Metropolitan Museum, namely, bands of lines, as seen in XI-20, XII-9, having knobs on the outer sides which are borrowed from knobbed lotuses. For instance, in XII-7 there is the reminiscence of the lotus volute (as derived from XII-5, for example) at once on the lotus and on the triglyph like bands on either side of the bird. At XII-8, the knob has left the flower and is only seen on the bands. XII-9 is from a vase on which it is the only decoration. PL. I-8 is a lotus tree, i. e., a "Sacred Tree," as will subsequently appear. 1-11 shows buds, attached above and below the knobs. At 1-17 we see buds growing from a flower. 1-12, 18 are partially opened flowers, having petals rounded at the top, an important point in connection with the position hereafter taken that the Greek palmette may be derived from the lotus form alone rather than from the lotus-rossette (palmette) combination found in Egypt. At 1-19 we see the calyx leaves about to fall from the flower. 1-21 is a highly typical lotus form which assists to specify forms found elsewhere which, from floral appearances or on botanical grounds, might be almost anything else. Compared with 1-15, turned upside down, the transition is clear, the triangles intermediate between centre and sides being omitted.

<sup>22</sup> References are entered as far as possible directly on the plates, and where this is done are not repeated in the text.

*loc. cit.*). For convenience of comparison a Kypriote lotus is figured at PL. III-4. It is clear that the patterns of Nos. 1, 2, 3 are a more stylistic and a more Grecianized expression of the Kypriote lotus patterns. Turning to the lotus patterns on vases from Melos on PL. IV, and in the first instance to Nos. 1, 2, 3, these are again related to those from Rhodos, as those from Rhodos are related to those from Kypros. The first three patterns of PL. IV are still more stylistic, still more Grecianized, expressions of the Rhodian forms. In PL. IV-1 the petals are triangular; in 2 they assume the palmette aspect; in 3 the palmette aspect is fully developed.<sup>23</sup> No. 11 contains the elements of the anthemion in a form related directly to No. 3. No. 16 is an elementary expression of all Greek scroll designs, and may be compared with x-1, 2. It leads us back to the variant III-8, which is simply a refined expression, at a later date, of IV-11. It is clear that IV-15 is a variant of IV-3 (middle portion) and of IV-11. From IV-15 we pass without difficulty to v-6, hitherto considered a form of ivy. v-11 is another variant. The *herzblatt* ("heart-shaped leaf"), v-6, appears reversed in IV-9, which also thus becomes a lotus derivative.<sup>24</sup> IV-5, 7 and 8 are from early Attic vases, and exhibit rude imitations of Melian or similar forms.<sup>25</sup> Phases

<sup>23</sup> Whether the palmette of IV-2 develops directly from a form like III-1 and 2, or whether it comes from an overlaying influence of the Egyptian and Egypto-Phœnician palmette, subsequently to be explained, is possibly a debatable question. Prof. Allan Marquand has suggested the latter hypothesis and, as it may occur to others, I will consider it here and recur to the question again. There is no doubt that rounded petals appear in Kypriote lotuses, I-12, 18, which do not offer any suggestion of a palmette influence and I presume that the aspects of later Greek decoration in vases are explained, in the rapid execution of decorative borders, etc., by a brush stroke which was naturally heavy at the start and narrowed to a point as it closed, producing the rounded petal form. We have, in III-1, 2, aspects of a lotus pure and simple, produced evidently by a symmetrical filling in of intermediate spaces of a form like III-4, simplified like I-21, but retaining the volutes. No palmette intermixture need be assumed between III-4 and III-1 and I do not see why any is required between IV-1 and IV-2. Of course the way is perfectly clear from IV-2 to IV-3 and from IV-3 to IV-11. As it will appear that the original palmette is also a lotus the question is not one of great importance.

<sup>24</sup> This design appears on a vase, published with others, by BÖHLAU in the *Jahrbuch d. Archäolog. Instituts*, 1887, pls. 3, 4. From these plates are taken IV-5, 7, and 8 (all marked "B." 1887.) Motives like IV-9, on objects from Spata will be familiar to students (*Bull. de Corr. Hellén.* vol. 2, pl. xv-1, 3). See also the familiar Mykenian motives on plates x-6, 10. Compare the Stele from the Sanctuary of Artemis Limnatis, in SEMPER, *Der Stil*, II, 421. One of the borders of the Amathus sarcophagus relates to IV-15 (*Descriptive Atlas of Cypriote Antiquities in the Metropolitan Museum*, I, pl. CXLIX).

<sup>25</sup> Nos. 5 and 8 are related to 11; No. 7 is an aspect of 14. Patterns similar to 14

of the Proto-Ionic appear in iv-10 and 13, and these again are derivatives of such forms as are seen on the shield, iii-6. These latter forms become lotus derivatives by the relation to the Kypriote ii-5.<sup>26</sup> iii-5 is from the same vase as iii-6, and shows an exaggerated phase of the triangle of iii-4, combined with the lotus spiral iv-16. iv-17 is a reminder of the constant appearance of ordinary lotus borders and lotus forms in connection with those which are more remote, and it will presently be observed that the constant presence of "rosettes" with these patterns is an allied lotus phenomenon.

A curious aspect of the lotus triangle and volutes is offered by the funeral stele on a vase published by Benndorf, v-8, which may be compared with x-12.<sup>27</sup> The designs of PLATE V have been generally chosen to exhibit in developed Greek art the more palpable reminiscences of its lotus origins. Nos. 2 and 4 are terracotta motives of a late period; 2 is a palpable lotus-anthemion; 4 has the Proto-Ionic triangle in two aspects; 5 is a palpably reminiscent form, or combination, of the lotus-palmette; 9 is a reminder of the constant association, in later art, of lotuses with developed palmettes, but with a form of the anthemion which is partially archaic. In the Græco-Etruscan art, to which this design belongs, the reminiscent archaic aspect of lotus derivatives will be found on examination to be very general. An instance is offered by vii-11, the foot of an Etruscan cist of the III century B. C., or later. I presume that v-4, of Græco-Roman art, is to be explained through this Græco-Etruscan characteristic.<sup>28</sup> vii-11 shows a reversed form of lotus volutes as compared with vii-12, from the Grotta Campana, which ranks in antiquity with the Regulini-Galassi tomb: compare the lotus on the sphinx head, vii-6, from the Regulini-Galassi tomb. The reversed aspects of lotus volutes, where both turn inward toward a common centre, is remark-

have already been designated by BIRCH as "a sort of trefoil lotus" (*Pottery*, p. 184), but he did not advance otherwise in the direction which this observation might have suggested.

<sup>26</sup> iii-7 becomes intelligible when turned upside down. The elemental form then appears as that of iv-11, with the outward curving lower lines produced in curve till they meet one another over the palmette. Again, looking at the design iii-7, held upright, the intervening palmettes resemble those in iii-8. It is only a question of scale.

<sup>27</sup> An unbroken example is given by FURTWÄNGLER and LOESCHKE in *Mykenische Vasen*, pl. xxxvi-364, where the streamers of the stele are conceived as serpents.

<sup>28</sup> A related fact is the aspect of the Tuscan Doric, noted by Mr. CLARKE (*A. J. A.*, II, 3, p. 267) as a Proto-Doric survival.

ably illustrated by the Kypriote vase published by Ohnefalsch-Richter in the *Journal of Hellenic Studies*, v, p. 103. It also appears in early Egyptian examples like VII-8.<sup>29</sup> The introrse scrolls of the so-called Phœnician palmette (*e.g.*, upper part of II-9) are hence derived. To return to other illustrations of PLATE V: the vase motive, v-7, is chosen as a general type of the connections between the Greek anthemion and the lotus, leaving the architectural examples to suggest themselves.<sup>30</sup>

It is clear from the foregoing that the capital from Neandrea is not belong to a necessarily or probably Assyrian Proto-Ionic. Lotus triangles and lotus palmettes are interchangeable. Both apparently represent the petals, or rather are derived from them. An aspect of the Neandreian capital appears IX-3 (XVIII dynasty), and may be frequently noticed on Greek vases.<sup>31</sup> As regards the Egyptian Proto-Ionic form just quoted, and many others, it is to be presumed that the Egyptians had originally developed their lotus spirals, as the relation of Kypriote, Rhodian, Naukratic, and Melian forms shows that the Greeks subsequently did: compare x-1, 2 with IX-3. The direct influence of the pure Egyptian motives and of the Phœnicianized Egyptian motives was evidently strongest in the earliest periods of Greek history, as shown by the Mykenai spirals and other decorative aspects of the "Mykenai culture."<sup>32</sup> Two things are clear: Greek ornamental art developed from the lotus motive: Egyptian art shows parallel results as regards the lotus spiral, at much earlier dates.

It should be observed that the detail represented by IX-3 appears, inside a spiral motive (in outlines like the Ionic of Bassai), and that, on the same page of Prisse d'Avennes, an exactly similar spiral design exhibits the spirals starting from lotuses as in x-1, 2.

### III, IV.

The query, What has become of the "Assyrian" palmette and of its supposed influence on Greek art? must now be met. Is it not possible

<sup>29</sup> PRISSE D'AVENNES, "Choix de Bijoux," XVIII dynasty (?), and "Ornam. des Plafonds; Legendes et Symboles," XVIII dynasty.

<sup>30</sup> v-10 appears to show the anthemion rounded petals on a palpable lotus, but it may be a case of rosette association to be presently explained.

<sup>31</sup> Notably GENICK and FURTWÄNGLER, *Griechische Keramik*, XVII, and ZANNONI, *Scavi della Certosa di Bologna*, LXXIX.

<sup>32</sup> The independent Greek art development, beginning in the VIII and VII centuries, appears to have travelled a road which the Egyptians had apparently left before the evidence of their monuments begins, but Egyptian pottery may yet be found showing the curled calyx leaves.

that it reacted on and over-lapped the lotus palmette and mixed with it in such a way that the two cannot be separated? I answer that the so-called "Assyrian" palmette (VII-9, 13, 14) does not appear on any archaic vase in the large New York collection. It does not appear elsewhere on any published vases showing the archaic lotus palmettes. This is one answer.<sup>33</sup> Another requires more space, but is quite definite. There is an Egyptian lotus palmette of obviously Egyptian origin, and antedating the known Assyrian palmettes by at least one thousand years. This Egyptian motive is found in numerous Phœnician examples and it appears to be the original form of the so-called Assyrian palmette. There is scarcely any evidence, on the other hand, in favor of the natural and general presumption, which gave the Assyrian motive its name, that the Assyrian palmette is a conventional form of the palm-tree and that its volutes are derived from the pendent bunches of dates (as explained for instance by Mr. Clarke). If the supposed Assyrian form, which so constantly appears in Assyrian art in combination with lotus designs of admitted Egyptian origin, is a Phœnician modification of the Egyptian lotus palmette—if, in other words, lotuses and palmettes are one and the same thing in origin—it is easy to understand why the Assyrian derivative did not react with much vigor on its Phœnician counterparts and originals. A direct Egyptian influence on Assyria must also be assumed since the XVIII dynasty, when Nineveh was inside the Egyptian frontier and Chaldaea was an Egyptian tributary.

The question of Assyrian influences on Greek art largely turns on the Phœnicians, for if these had more influence on Assyria than has been commonly supposed, and more than Assyria had on them, the reaction of Assyria through Asia Minor only repeated an influence which came to the Greeks more directly and in stronger ways. In Dumont et Chaplain, *Céramiques de la Grèce propre* (pp. 133 and 136), there is a very fair admission of the unknown quantity which lies in debate between Phœnician influence on Assyria and the counter hypothesis. It is admitted that the earliest remains of Assyrian decorative art are strongly Egypto-Phœnician. That Hittite and Phœnician architect-

<sup>33</sup> The Egyptian lotus palmette (and its Phœnician copy) appears to have been mainly confined to metal, or to relief designs based on metal originals. These do not seem to have been directly imitated by the Greek vase painters, but it is more than likely that their influence promoted the development of the Greek palmette from the lotus motives of the vases.

ure was carefully studied by the Assyrians is proved by a number of royal inscriptions, especially those of Sargon, which state expressly that, in building the royal palaces at Khorsabad and Kouyundjik, the Hittite palaces were imitated. Such facts do not minimize the Chaldaean element in Assyrian civilization, which, of course, was fundamental and far more powerful than any other; and the relative barbarism of the Assyrians in relation to the older Chaldaean culture is generally admitted. The real civilization of the Tigris-Euphrates valley had long preceded the period of Assyrian military power, and long outlived it. It is not detracting from this civilization to acknowledge Phœnician influence on Assyria. The view that the rosette is an Egyptian lotus motive gives new importance to the action of Syria on Assyrian art.

In the lotus motives so constantly repeated in Egyptian decoration there are a number in which lotus flowers and lotus buds support a rosette form (PL. VI-2, 6, 17,), just as in other cases a lotus flower supports a lotus bud or a lotus leaf (PL. VI-1, 10). These rosettes are likewise constantly found in association with lotus motives on the ceiling decorations (X-1, 5). In Egyptian representations of vases we also find cases where stalks supporting rosettes alternate with others supporting lotus flowers or lotus buds, and in some *not* "brought as tribute by the Kefa."<sup>34</sup> Examples of these various appearances are as common for the XVIII and XIX dynasties as for any period: that is, they antedate the Assyrian related motive by at least seven hundred years. It may be observed, here, that rosettes constantly accompany the lotus motives of the Kypriote, Rhodian, Melian and Naukratic vases, but they have been generally considered as an indication of Asiatic style. Notwithstanding the constant appearance of these ornaments in Egyptian decoration (X-1, 3, 4), so long antedating anything known of Assyrian art, the presumption that they are a distinctly Assyrian motive is strangely fixed in current archaeology. Longperier (*Musée Napoléon III*, in text for pl. XXIX) remarks that the rosette appears as a decoration on certain vases offered by Asiatic tributaries (the Kefa, supposed to be Phœnicians) in reliefs at Karnak; with the direct and purposed implication that it is not a native form in Egyptian art, but a Phœnician derivation from Assyrian art.<sup>35</sup>

<sup>34</sup> PRISSE D'AVENNES, "Vases en or emailé: " two plates, and several other cases.

<sup>35</sup> Only one explanation of this suggestion can be offered, viz. that the publication of Prisse d'Avennes dates from 1879. It should be noted that in the published architectural reliefs, the rosette is rarely found in Egyptian decoration. In the

What is the connection between the rosette and the lotus? There is no difficulty in answering this question. An examination, in the *Description de l'Égypte, Botanique*, pl. 60, of the ray-shaped stigma which, in different aspects, crowns the ovary of the blue and of the white lotus, *figs. 14, 15*, furnishes the answer.<sup>36</sup> The ovaries or seed-capsules of all varieties of the lotus contain seeds which were made into flour for food by the Egyptians: to this end, the lotus was sowed as a crop during the inundation.<sup>37</sup> This use of the lotus seeds for

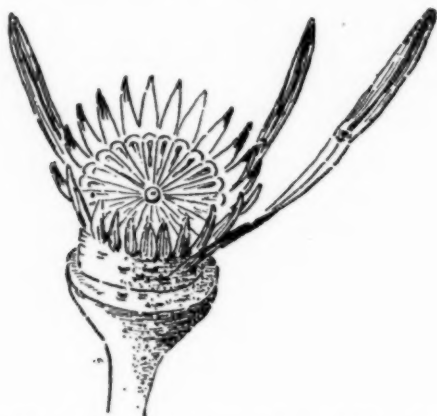


FIG. 14.—*Egyptian Lotus: stigma and ovary (white variety).*

painted decorations, for the first time abundantly illustrated by Prisse d'Avennes, it occurs constantly, and almost invariably in connection with lotus motives or with spirals which derived from them. The contrary holds of Assyrian art, where it is in carved reliefs but also with lotus motives that the rosette is a familiar decoration. The Assyrian carved reliefs have always been the most abundantly illustrated department of Assyrian art, and Egyptian decorative motives in wall painting were generally unfamiliar to untravelled students before the publication of Prisse d'Avennes. Some writers assume that works of art imported into Egypt by Phenicians must demonstrate that the art which was imported was foreign to Egypt. On the same principle if a king of France presented a work of French Renaissance art to an Italian dignitary of the XVI century, this work of art would show that the forms of Renaissance art were derived from France and not from Italy. The earliest remains of Assyrian ornamental art date from the IX century. The earliest instance of a Babylonian rosette appears to be that of the XII century—on the garments and mitre of Merodach-idin-akhi (DIEULAFOY, *L'Art Antique de la Perse*, I, pl. IX).

<sup>36</sup> These two distinct aspects are also exactly represented by a large number of the gold objects from Mykenai, as shown by Dr. Schliemann's illustrations.

<sup>37</sup> The picture designated as a "Joute des Mariniers" in Prisse d'Avennes shows

food makes it clear why the top of the ovary was a familiar aspect of the flower; which was frequently, in Egyptian symbolizing fashion, represented at once in a double aspect. Thus we understand the bud or the flower which supports a picture of the ovary stigma. Let us observe in the next place certain lotus borders where the flower supports an object shaped like a half-moon (VI-9, 12). This is a portion of the top of the ovary shown "in plan," rising above the flower. In this particular case, as no rays appear, it may be the circular top of the seed-capsule of the rose-colored lotus. The yellow color of the original corresponds to the color of this seed-capsule when the flower is in bloom. It is now possible to understand the Egyptian lotus-palmette, VI-15, 16, 18, *etc.*—which is simply a combination of the voluted form

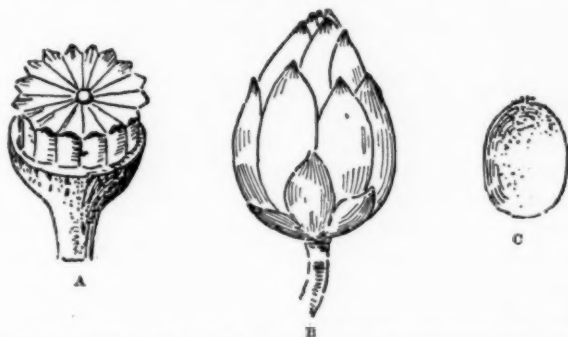


FIG. 15.—A. Stigma of blue lotus: B. Lotus bud: C. Lotus seed (rose-colored variety).

of lotus flower with the ray-shaped ovary stigma. The various aspects of lotus volutes and lotus spirals in these designs (PL. VI-1, 15, 16, 17, 18, *etc.*), are made comprehensible by the development of lotus spirals and volutes already considered: compare II-3, 9. No doubt many rosette designs may be explained as views of a flower with expanded petals seen from above, but these are not the clues to the lotus-

in reality a quarrel between the boatmen of craft loaded with baskets of seeds of the rose-colored lotus (*fig. 15-c*). Lotuses are also piled on the boats and surround them. Seeds of the rose-colored lotus observed in the lotus ponds of Mr. E. D. Sturtevant, at Bordentown, N. J., were about as large as small filberts. The taste is agreeable in the raw state, not as raw as the taste of a chestnut but something like it. The nurseryman in charge said that boys of the neighborhood ate them as they did chestnuts, as the plant has been naturalized and grows quite plentifully in ponds of considerable size.

palmette combination. The rosettes of petals have pointed rays and these are never found in the palmette.

Other phases of lotus combination may be noticed in this connection. A lotus supporting the seed of the rose-colored variety, No. 7: a bud supporting a bud, No. 8; a rosette supporting a leaf and bud, Nos. 11, 13; a seed capsule supporting a bud, No. 14. PL. VI-1, 20, giving voluted lotuses supporting a bud, explain IX-4 and many similar forms. This bud is assumed, by M. Dieulafoy, to be the ovary or seed capsule, in his theory of the Ionic capital, in which he considers IX-4, to be the normal form. He does not specify which variety of ovary is intended, and *figs.* 13, 14, 15-A show that there are three varieties. The monuments show that the Egyptians did not represent a conventional botanical section of the lotus but that they distinguished accurately the three varieties of seed capsule, pictured as seen from above, *i. e.*, the ovary stigmas.

It is now clear why the Kypriote lotuses I-2, 3, exhibit rosettes figured on the central petal triangle. In the "Lawrence-Cesnola Collection," phot. 11, a flower generally resembling I-1, 2, 3, has rosettes within the volutes which entirely surround them—a prototype of the rosettes originally decorating the centre of the Erechtheion volutes or of the Sicilian capital v-1. In *Salaminia*, p. 255, there are lotus rosettes in the lotus volutes. The rosettes within the Ionic volutes of the capitals of Susa and Persepolis are also a case in point.

The remarkable palmette in gold, originally enamelled, from Tell Defenneh (Mr. Petrie's excavations) in the Boston Museum of Fine Arts, is roughly figured, at VI-21, by the kind consent of Gen. Loring.<sup>38</sup> The date is presumably that of the XXVI dynasty, but there is no question of the independently Egyptian character of the palmette form, here elongated for decorative reasons. The Egyptian character is determined here by the voluted lotus support. The two amulets in blue porcelain of the Boston Museum of Fine Arts, 22 and 23, also figured under disadvantageous circumstances, are substantially accurate as showing that the palmette, derived from the voluted lotus, is an original Egyptian form.<sup>39</sup> As regards the amulets, the objection based on

<sup>38</sup> I regret very much that, on account of hasty publication, I have been obliged to depend on a memorandum sketch, not intended, when made, for use in publication.

<sup>39</sup> In MARIETTE's selection of typical sepulchral amulets (*Album du Musée de Boulaq*, photo. 17) there are three palmettes like VI-23, and five "rosettes," figured as ordinary and characteristic Egyptian forms.

uncertainty of dates and the natural objection of an Assyrian derivation during the VIII and VII centuries, still has to be met, but this is easily done, and the point which answers this objection also determines the Egyptian character of the Phœnician palmette motives of PL. VII-1, 2, 3 (bronze) and 10 (silver), from the Regulini-Galassi tomb (*Museo Etrusco Vaticano*, I, xvii). In VI-1, 3, 15, 16, 17, 18, 19, 22 and in IX-1, little tabs or streamers are seen under the volutes, as also seen in II-9. These may be originally lotus buds, judging by a reversed arrangement in IX-2, where buds are clearly represented. These distinctively Egyptian tabs are not found in Assyrian palmettes except in bronzes (one only known to me<sup>40</sup>) of a class which are conceded to be Phœnician. In this case the palmette is the same, as regards the tabs, as that of the Regulini-Galassi tomb. This tomb and the Grotta Campana belong to the earliest period of Etruscan tombs, and the former has well-defined relations in construction with those of Mykenai and Tiryns. There can hardly be a doubt, therefore, that the Phœnician palmettes VII-1, 2, 3, defined by the tabs or streamers as being of Egyptian derivation, precede the Assyrian examples. The resemblance between these Nos. and VII-9, 13, 14 is so close that there can be no difficulty in admitting an Egypto-Phœnician derivation for the "Assyrian" palmette. Nos. VII-6, 10 and IV-12 are from the same tomb. Comparing IV-12 with IV-5, we have a new demonstration that the latter is a lotus form; while a comparison of IV-6, from an Etruscan vase, with VII-12, from the Grotta Campana, gives a new demonstration that IV-6 is a lotus form.<sup>41</sup>

VII-15, from an Etrusco-Phœnician cist, shows the reaction of a voluted lotus derivative, like IV-6, on an independent lotus flower, which is supported by it. By comparing the palmettes and other lotus decorations on this cist, in the *Monumenti inediti*, VIII, PL. XXXVI, the unity of the motives will again militate against the Assyrian origin of the "Assyrian" palmette.<sup>42</sup> The curious forms on an archaic Etruscan vase published by Lenormant (*Gaz. Arch.*, VII, 32), which look

<sup>40</sup> LAYARD, *op. cit.*, plates for bronzes: not clearly shown, in fact not shown at all, in the same pattern, PERROT, II, 736.

<sup>41</sup> PL. VII-5, from the Amathus shield (COLONNA-CECCALDI, *Monuments*, pl. ix), is a very common Phœnician lotus palmette, especially on the pateræ. It relates to VII-4 from Persepolis (OWEN JONES, XIV-4). VII-7, from Susiana, a tile decoration discovered by M. Dieulafoy (*Revue Arch.*, July-Aug., 1885, and *Harper's Mag.*, June, 1887), also showing the Egyptian tabs, relates to VI-21.

<sup>42</sup> This cist dates from the VI or VII century, but the style of the motives is earlier.

like representations of a rising sun or moon are proved to be lotuses by comparison with v-10.

M. Dieulafoy has asserted decisively the precedence of the Egyptian palmette as against the Assyrian, and the derivation of the latter from it (*op. cit.*, III, 61). He assumes that the elemental form of the Egyptian palmette is the *flabellum*—the semi-circular ensign frequently seen in the reliefs and paintings. This is, in reality, a half section of a rosette form composed of rayed lotus petals.

## V.

If the Assyrian palmette is a lotus it is necessary to face the problem of the "Sacred Tree." Hence the designs of PL. VIII. No. 1, a detail of an Assyrian relief in the Metropolitan Museum of Art, shows the hatched incised lines by which the lotus-bud is often covered in Assyrian reliefs. Compare VIII-2, the object held by the divinity facing the "Sacred Tree," with the bulbous bud of the rose-colored lotus, in *fig. 13*. I have no argument to offer about this object, aside from the mention of certain apparently related facts. The advice of a competent Assyriologist is to the effect that the texts throw no light upon the subject of the origin of the Assyrian "Sacred Tree,"<sup>43</sup> and that no hypothesis on the subject is extant. *Fig. 15-B* is a sketch from nature (the lotus-pond mentioned at Bordentown, N. J.) of that aspect of the rose-colored lotus which appears to have been indicated—in accordance with the naturalistic tendencies of Assyrian art—by the hatched incised lines, producing that resemblance to a fir-cone which has caused this designation to be accepted in default of a better one.<sup>44</sup> In *fig. 15-B* may be observed, in the overlapping leaves of the bud, an effect resembling that of the scaly surface of a fir-cone. The following facts are related to this observation. In the tile decoration, Place, III, 15; Perrot, II, 308; two winged divinities holding bud-shaped objects, not detailed, face the lotus rosette. In the relief figured by Perrot, II, 108, the divinity introduces the bud-shaped object into a lotus palmette. A divinity holding the bud-shaped object described above is associated with an adorer facing him, bearing an antelope and a branch of ordinary

<sup>43</sup> That is, there seem to be no traces of it in early Babylonian mythology.

<sup>44</sup> The introduction of this effect in the buds of *figure 13* would have contradicted, by its detail, the general treatment of the cut, and it was therefore avoided in that illustration.

lotuses: Perrot, II, 108. At VIII-5, 6, 7, 8, are hands of similar Assyrian worshippers, from designs in Layard, holding lotus emblems.<sup>45</sup>

The observation as to the hatched incised lines of the lotus bud VIII-1 defines as lotus "trees" all "Sacred Trees" which correspond to VIII-4. The "Sacred Tree" of the Kypriote vases in Perrot (III, figs. 518, 521) is a lotus tree. The "Sacred Trees" of the vase published by Ohnefalsch-Richter (*Journ. Hell. St.*, v, p. 103) are a remarkable illustration, PL. XI-16 (one of the lotus rosettes is not illustrated), but scarcely less so are the steles supporting lotus triangles with knob-shaped appendages as in PL. I, XI-22, 24 in the Lawrence Cesnola Collection (phot. 13). Lotus "trees" are frequently found in Egyptian design, as is shown, for example, in VIII-3. Compare Horus as a hawk within a lotus tree, *Description de l'Égypte*, III, 60.<sup>46</sup>

I am informed by Mr. Ch. E. Wilbour that, in Egyptian worship, the lotus represents the reproductive aspect of Osiris: hence the Horus-child rising from the lotus, or the Horus hawk in the lotus tree. The Phœnicians, those cosmopolite worshippers, may have transferred to Assyria an aspect of this cult.<sup>47</sup> It is quite clear that II-10 of this paper represents an adorer and a lotus tree, and in this connection

<sup>45</sup> 5, hand with branch of lotus rosettes; 6, hand with branch of lotuses having rosettes at the base; 7, hand with branch of lotuses and buds detailed as in VIII-2; 8, hand bearing a branch of lotus palmettes. This association is significant. PL. VIII-9 shows the lotus buds, as explained by VIII-1, rising from the rays of a lotus palmette—on an embroidery with ostriches. This combination is also significant. Another phase of the branch, not illustrated, is seen in PERROT, II, 513, where the worshipper faces a "Sacred Tree" of lotus buds which rise from a lotus form of the same aspect as that seen at the bases of the flower and buds of VIII-1. This is an aspect generally recognized, and very common. It appears, for instance, in the capitals of the terracotta adicule, PERROT, III, 277; on several colonettes figured on the Balawat Gates, etc. The branch here in question shows a vegetable form usually classed as a pomegranate. It appears very often in lotus and lotus-palmette borders—on the ivory, PERROT, II, 730; in the "Sacred Tree," PERROT, II, 685; in the border of embroidery, PERROT, II, 774; and in the enamelled brick fragments, PERROT, II, 311. From these last illustrations, of considerable size in the detail (the latter with a border of lotus palmettes), it may be concluded that the object represents a lotus, of the simplified form noted at the base of buds and flower in VIII-1, or resembling v-9, supported by a magnified seed, a disk, or a conventional rosette. This so-called pomegranate is very common on the borders of the vases from Kyrene.

<sup>46</sup> Also the "Genii of Amenti" on the lotus, *ibid.*, II, 72.

<sup>47</sup> It will occur to persons not versed in Assyriology that the "eagle-headed" divinity who frequently faces the lotus tree may be an Assyrianized Horus, who constantly appears in Egyptian art as a hawk-headed human figure. In the British Museum photo. 355 the head appears to be more that of a hawk than of an eagle.

attention may be directed to the vase published by Ohnefalsch-Richter (*Jahrb. arch. Inst.* 1886, pl. VIII) representing a man in front of two large lotus flowers, one of a conventional the other of naturalistic design.<sup>48</sup>

## VI.

It is singular that the Egyptian Proto-Ionic forms, such as IX-1, 3, 4, have attracted little attention from students, but the demonstration of the derivation of one form of Ionic capital, as offered by Kypriote monuments, must draw new attention to the possibility that Proto-Ionic forms, as they appear in Egypt, may also have exercised a direct influence on Greek Ionic. This suggestion has been formally made by Auer in the *Zeitschrift für bildende Kunst*, 1880, No. 10, in a series of three papers devoted to the Egyptian Proto-Doric triglyphs.<sup>49</sup> It is apparent that the lotus volutes of Kypriote vases and the lotus spirals of Rhodes and Melos, throw a new light on the way in which the Egyptian volutes and spirals must have developed, and on their connection with lotus forms, with which in Egypt they are constantly associated. From this point of view it is an obvious conclusion, though it may not be superfluous to state it once more, that Greek and Græco-Phœnician vases repeat an evolution of lotus spirals and volutes which must have taken place in Egypt several thousand years before. The spirals of Mykenai, and the ceilings at Orchomenos and Tiryns, are sufficient reminders that the ultimate results of Egyptian lotus development were also directly transferred to Greek decorative art in the earliest, as well as in later, times. It is not to be overlooked, on the other hand, that naturalistic lotus motives are combined with the extreme conventional developments at all times in Egypt, just as they are combined in the same Kypriote designs. We cannot be certain, simply on account of the lack of remains, that Egypt and Egyptian-

<sup>48</sup> Figured also by REINACH, *Revue Arch.*, 1885, II, p. 360; and PERROT, IV, p. 564. Reinach has already related the design to the Assyrian "Sacred Tree." Compare the lotus and solar disk, PERROT, III, fig. 234 and LAJARD, *Culte de Mithra*, XXXI-3, with various associations of the Assyrian sacred tree and solar disk.

<sup>49</sup> My reference was obtained from DURM, *Die Baukunst der Griechen*, p. 11. Durm's own reference to Ionic forms as derived from Egypt—"die aus dem heissen Aegypten entnommenen ionischen und dorischen Bauformen"—must refer to the construction, as he cites Sempér on the Ionic capital. DE SAULCY in his *Voyage autour de la Mer Morte*, sustained the view that the Ionic of the tomb of Absalom at Jerusalem, generally ascribed to a late period, is of a date corresponding to the traditional designation. Auer makes no reference to the lotiform origin of the Ionic capital.

ized Syria did not exhibit designs—in pottery, for example—contemporary with those in Kypros of a more or less related character. But, as far as remains are concerned, the Kypriote lotuses are the only ones whose naturalistic forms directly relate their volutes to the downturned calyx leaves of the natural flower, and consequently they are the only forms which give a clue to more highly conventional phases of the Egyptian volutes and spirals. The comparative study of Kypriote lotus forms shows that the lotus was in Kypros, as in Egypt, a decorative fund, of which various conventional aspects were combined, separated, or reunited, while the natural flower was still observed and copied and also made a basis of decoration. In accepting the possibility of a direct transmission of the Egyptian ornamental Proto-Ionic forms to Greek art, a question already suggested may also be discussed: Did not the Egyptian or Egypto-Phœnician lotus palmette directly produce the Greek? On this head exact conclusions must come from Naukratis. The necessary dependence of this paper on published illustration, aside from Kypriote vases, and a want of acquaintance with the Naukratic pottery discovered since the publication of *Naukratis I*, make any pretence to positive conclusions impossible. As a matter of provisional suggestion, this may be said. Evidences on PL. VI derived from ornamental details mainly on ceilings of the XVIII–XX dynasties, and from a few ornamental remains, do not themselves demonstrate that the palmette, which the Phœnicians evidently took from Egypt, was as controlling an ornamental fashion there as it became in Assyria. Regarding the Phœnicians and their influence on the Greeks in the matter of transmitting the palmette, let it be remembered that this influence must be conceived as entirely and absolutely subordinate to that exercised by the Egyptians themselves after the foundation of the Greek colonies in Egypt. Since the discovery of the scarab factory of Naukratis, and the obvious identity proven by Naukratic fragments to exist between the Græco-Egyptian style and that hitherto presumed to be Asiatic, the theory as to the Asiatic aspects of Greek and Italic art, in the VII and VI centuries, falls to the ground.<sup>50</sup>

I do not myself think that Greek decorative art experienced much influence from the combined lotus-rosette form, *i. e.*, the Oriental pal-

<sup>50</sup> W. FROEHNER's demonstration (*Collection Charvet*) that the polychromatic opaque glass, so long considered Greek, because so constantly found in Greek tombs, is Egyptian, points now to the direct Græco-Egyptian export of these pieces.

mette. It appears, on the evidence of vases from Rhodes and Melos as related to Kypriote, to have developed a palmette form of its own from the lotus itself. As far as pottery is concerned, the fact that the Egypto-Phœnician palmette does not appear on the Kypriote vases in the Metropolitan Museum, or on those of Rhodes which bear the lotuses necessary, as a connecting link, for the comprehension of the Melian style, points to this conclusion. In Melos also the decorative style points less to a mixed form like the lotus-rosette combination than to an independent development of the lotus flower motive into palmettes and volutes of its own device. Although, on this supposition, Phœnician influence loses its importance for the Naukratic time, it gains for that of the Mykenai culture. The comparisons of PLS. X and XI give but a slight indication of the overwhelming evidence for the dominance of lotus derivative forms in the Mykenai period. Before briefly considering these, the lotus origins of the egg and dart moulding may be pointed out.

The demonstration of an Egyptian origin for the Ionic capital and for the Greek anthemion is curiously corroborated by the fact that the egg and dart, or egg and tongue, moulding is derived from a form of Egyptian lotus border. The juxtaposition in illustration of the Naukratic architectural relief designs (IX-9, 10) with lotus borders from Kypriote vases and with a *repoussé* bronze relief from Olympia (IX-8) will make all argument on this head unnecessary. The relation between the egg and dart moulding and the lotus border was published, in 1856, by Owen Jones, and in 1870, by M. Léon de Vesly,<sup>51</sup> but in a somewhat cumbrous and unnecessary way. The observation, with both these writers, refers to a border of lotuses with intervening bunches of grapes.<sup>52</sup> The egg between the darts is supposed, by them, to have grown from the bunch of grapes, and M. de Vesly also supposes that the "fir-cone" between lotuses in Egyptian borders has also been the starting point of the egg portion of the egg and dart. This mistake about the "fir-cone" was probably caused by the bulbous form of the lotus buds represented. The lotus border IX-6 shows the alternating buds and lotuses, but it is not the bud which grew into the "egg." This bud is still represented on the "egg" of one line of the Erechtheion moulding and appears also on the "egg" in IX-9. If we reverse

<sup>51</sup> *Société centrale des Architectes: Annales*, 1871.

<sup>52</sup> OWEN JONES, *Grammar of Ornament*, notes to plate VII "Egyptian Ornament": PRISSÉ D'AVENNES, *op. cit.*, "Frises Fleuronées."

the border IX-6, it appears that the "egg" is simply the rounded relief which results from cutting the flowers into relief by incision. This appears more clearly by reversing the *repoussé* bronze from Olympia IX-8, where the outlines of the lotus assume the form of I-21. Nos. 9 and 10 are also perhaps more evidently at once egg and dart mouldings and lotus borders, when they are reversed.<sup>53</sup> The supposed leaf decoration painted on the Doric capitals will appear also, if closely observed, as a lotus border of "egg and dart" type. IX-5 has been noted by Mr. Petrie, in *Naukratis I*, as corresponding with the necking ornament on the columns of the Erechtheion, and is illustrated as corroborative.

## VII.

PL. X is designed to associate the Egyptian lotus spirals and "rosettes" with Mykenaian art forms. It also serves to present a suggestion hardly susceptible of demonstration, viz., that the so-called "Greek" fret is a derivative of the lotus spiral.<sup>54</sup>

The ceiling from Orchomenos, x-5, shows a design which has been

<sup>53</sup> It is clear that the bud itself which remains on x-9 has nothing to do with the development of the "egg" form. No. IX-7 was the lotus border which first struck me as being an egg and dart moulding. It represents two lines of border like IX-6 turned in opposite directions and placed together. It is a well-known law of Greek architectural decoration that its movement was one from colored decoration in flat to carving in low relief. The carving becomes deeper and the relief higher as time advances. The absence of projected lotus borders in Egyptian art and the fact that the egg and dart moulding first appears in projection in Greek use does not contradict this. The projected egg moulding alone appears during the v dynasty (DIEULAFOY, *op. cit.*, III, 62).

<sup>54</sup> PL. x-4 is mentioned as a lotus spiral on account of the constant association which may be observed with lotus rosettes and on account also of the constant association of the spiral and the lotus, as observation of the Egyptian motives in *Prise d'Avennes* will show. The usual association of lotus rosettes with the "Greek" fret in Egyptian decoration is significant in this connection. In *Prise d'Avennes* there are six instances where the spiral starts from the lotus and where the design includes the rosette; four instances of the spiral and rosette; five of the fret and rosette; five of the motive like x-7 from Beni Hassan, which has been proved a lotus derivative; and two cases of the Ionic spiral which must be included in the lotus motives. There are only two additional cases of spiral motives; i. e., there are only two cases where some relation to a lotus derivation does not appear in the design itself. The "Greek fret" is now well known to be an early Egyptian motive. The suggestion that the Egyptian spirals like x-3 are variants of x-2 has already been made, by *Prise d'Avennes* among others. The counter hypothesis is the more probable of the two.

already recognized as Egyptian, and Schliemann's *Tiryns* offers another example. I am not aware whether the lotiform character of the motive has been recognized.<sup>55</sup>

PL. XI is devoted mainly to designs taken from Furtwängler and Loeschke's *Mykenische Vasen*.<sup>56</sup> Under this heading are included vases from all parts of the Eastern Mediterranean which belong to the epoch of art and culture first revealed by Dr. Schliemann's excavations at Mykenai. The vases of the "Mykenai culture" evidently belong to a centre of manufacture quite distinct from that of Kypros. A certain number have been found in Kypriote tombs, as importations. They may be easily distinguished, for instance in the New York Collection, from the Kypriote examples, but the juxtaposition with Kypriote pottery offers valuable assistance in fixing some points as to dates of types in the latter. The Mykenian pottery has the characteristics of a thoroughly independent art as to details, but its motives, at least in plant life, appear to show the same curious relation, which is exhibited by later Greek art, with the one type of floral decoration to which hieratic and national predisposition confined the Egyptians. The authors of this publication have clearly seen that the most conventional types of this pottery decoration are the latest; that natural forms are the starting point, gradually modified by habits of current repetition, careless execution, or abbreviating methods, until in the course of centuries all conception of the original starting point has disappeared. The lotus motives here selected for illustration will probably in the main speak for themselves.<sup>57</sup>

<sup>55</sup> PL. x-6 relates to the lotus derivatives iv-9, v-6, v-11. Related form at x-10. Both relate to *Mittheil. d. deut. Instituts: Athen. Abth.*, xi, pl. III, 135, lowest design but one on the left. This motive appears constantly in the Mykenai period. PL. x-7 from Beni-Hassan. This spiral derivative is explained by x-8. This scheme was suggested by Mr. C. Harriman, of the Columbia College School of Architecture, from observation of the lotus borders 1, 2. A related lotus form on the vase at p. 160 of *Mycenae* leads me to suppose that the design of x-11 may also indicate lotus forms although it appears to be a lily. Nos. 9, 13, 14 are easily understood by recurring to preceding illustrations. Nos. 9 and 14 recall iv-7. The triangles of x-17 are probably derived from the lotus triangles on 15 and 16. Compare i-14, 15.

<sup>56</sup> Nos. 1-19, excluding 16, have generally the lettering "F and L", and all are marked with the plate numbers of the original publication.

<sup>57</sup> PL. xi-1, 2, 3 are motives not farther removed from the outlines of vi-5 and vi-14 than Phœnician transmission or departures in Greek imitation would naturally explain. As for the volutes of xi-1 and xi-2, they are infallible "ear-marks" of a lotus, however transformed or deformed. xi-5 is the hasty outline of a lotus palmette corresponding to vii-5; xi-4 is probably a variant of the same, cf. i-21; xi-6 is kin-

XI-14 shows two adjacent spiral designs, as on the original vase. The left hand pattern is an abbreviated form of a familiar motive, like IV-10. The evolution of the right hand pattern gives the clue to a large number of vase spirals. Here a third spiral takes the place of the abbreviated triangle, which is pushed to one side.<sup>58</sup>

XI-20-26 are geometric patterns from the Lawrence-Cesnola photographs which are explained by the following plate.

XII-2 is derived from the lotus form XII-1, reversed and stripped of the volutes and upper projections. The same form is turned sideways in XII-3, 4. XII-6 is derived from a form like XII-5 reversed, stripped of volutes and intermediate petals. XII-7 shows the reminiscent volutes already explained, both on the lotus and on the upright bands, to which they have passed from the lotus motive. In XII-8 these rudimentary volutes have left the lotus and are seen on the bands only. In XII-9 the band with knobs has become an independent motive. The triangle XII-10 is defined as a lotus by these knobs (compare XI-20, 22, 24 and I-15).<sup>59</sup>

Without reference to the dates of individual vases it is clear that the Kypriote geometric style as a whole must be later than the first lotus patterns which grew into it, and it is clear that there are no Kypriote-Phœnician vases earlier than those which show the lotus motives. We have here a curious parallel to the position reached as to the Egyptian Ionic volute and the Egyptian lotus spiral.<sup>60</sup>

dred with VII-15; XI-7 is a conventional voluted lotus with lotus rosettes inside the volutes; cf. the Kypriote counterpart in the Lawrence-Cesnola Collection (*Salamina*, p. 255) already quoted. XI-9 is clearly a later conventional stage of XI-7; cf. XI-13. XI-8 is referred without difficulty to I-15; XI-10 is a barbaric version of V-10; XI-11 relates to XI-6; XI-12 to X-1, 2.

<sup>58</sup> XI-15 is a phase of XI-3. XI-17, 18 are geometric patterns derived from XI-1 or 2. XI-19 is a decorative pattern derived from the outlines of the lotus-border which produced the egg and dart moulding.

<sup>59</sup> In XII-11, 12, 13, 14, we see associated four triangles like XII-10. Each one has driven its knobs inside the adjacent triangles. Hence a triangle motive with interior knobs, as seen in the triangles of XII-3, 4 and 15 and XI-26: cf. PERROT, III, fig. 507.

<sup>60</sup> I am able to announce that the *ankh* is also a lotus, although the illustration cannot be offered with this paper. The relations of the *ankh* to the triangle have already been suggested by Mr. PINCHES (*Babylonian Record*, August, 1887). These relations can be demonstrated. The lotus triangle with disk, as in the Phœnician "Sacred triangle," is the counterpart of the lotus amulet which forms the basis of the *ankh*. The "Genii of Amenti" stand on the lotus triangle in the relief shown by MARIETTE, *Album du Musée de Boulaq*, photo. 13.

According to Pierret<sup>61</sup> the lotus was a symbol of the Resurrection. To Maspéro (*Hist. d. Peuples Anc.*, p. 42) the lotus, in Egyptian belief, was one of the mystic habitations of the departed spirit. It is as symbol of the Resurrection that the Genii of Amenti stand upon the lotus. According to Prisse d'Avennes the lotus was a symbol of life and of immortality. The starting point of Colonna-Ceccaldi's suggestion for the Ionic capital was a sepulchral lotus stele. The most beautiful examples of the Athenian anthemion are tombstones. The triangle stele in Benndorf (v-8) is a sepulchral monument. The triangle steles XI-22, 24, are on sepulchral vases and it may be that the entire lotus decoration of the Kypriote-vases has a mortuary significance. In late Græco-Roman antiquity the lotus still retained its significance as a mortuary emblem.<sup>62</sup> At Egyptian funerals the guests were given bouquets of lotus flowers.<sup>63</sup>

The Gorgon-head in *figure 16* is from a Rhodian vase which has been lately published by Mr. J. Six, at the suggestion of Prof. Loeschke.<sup>64</sup> Mr. Six observes that the nose is an inorganic ornamental form but he and Prof. Loeschke have not noticed that it is a Proto-Ionic stele turned upside down. If any one should conceive that this is pushing one's case too far I further observe that the ears are Ionic capitals and that they help us to understand the nose. This Proto-Ionic joke of a Rhodian potter has not entirely lost its savor. It is a very interesting point about this vase that Mr. Six, who has devoted much study to the Gorgon type, believes it to be derived from Kypros.

W. H. GOODYEAR.



FIG. 16.—Gorgon-head from a Rhodian vase.

<sup>61</sup> *Panthéon égyptien*, p. 62.

<sup>62</sup> *Annali*, 1843, "Ornamenti funebri."

<sup>63</sup> OSBURN, *Monumental History of Egypt*, vol. I, p. 43.

<sup>64</sup> *Journal of Hellenic Studies*, VI, p. 275, pl. LIX.

## GREEK INSCRIPTIONS PUBLISHED IN 1886-87.

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The most important of the inscriptions published during the past year fall within the domain of the history of the Greek alphabet. Two great branches of that alphabet have added such rich stores to their stock of materials, that S. Reinach does not hesitate to declare that the history of the Greek alphabet must now be rewritten. However that may be, it is certain that a distinct and substantial advance has been made in our knowledge of the archaic alphabets, of that of the fatherland, Krete, on the one hand, and, on the other, of the Ionic, from the distant Milesian colony of Naukratis.

The excavations carried on at Naukratis by the Egypt Exploration Fund under the direction of Mr. Petrie have been prosecuted with so much care and scientific accuracy that we may rely upon their results with great confidence. Accepting the statement of Polycharmos, that a temple of Aphrodite existed at Naukratis in 688 B. C., as proof merely that its inhabitants believed the town to be a very ancient one, Mr. Petrie judges, from the evidence of the remains, that its foundation occurred about 670 B. C.,<sup>1</sup> during the disruptions caused by the Assyrian invasion and the wars of Taharka. A scarab-factory furnished scarabs belonging to the reigns of Psamtik I and II, 664-589 B. C.; and two feet below this general level was a stratum of burnt material extending over a considerable space in the southern part of the town, which proves a still earlier occupation. From this, and also from the style of the pottery, the foundation of the temple of the Milesian Apollo mentioned by Herodotos is placed at about 650 B. C. Close behind this temple was found a trench in which it is evident that the remains of broken pottery dedicated in the temple were deposited, as the greatest number of inscribed fragments were found here, mixed with earth and sand, at various depths; showing in general an advance upward from coarse and archaic to more regular and familiar forms. The inscriptions are mostly simple dedications to Apollo, or Apollo the Milesian, and they

<sup>1</sup> HIRSCHFELD's arguments to prove that Naukratis was founded about 590 B. C. (*Rhein. Mus.*, 1887, pp. 209 ff.) fail to convince me.

have been discussed by Mr. E. A. Gardner both in the volume on Naukratis published by the Egypt Exploration Fund, and in the *Journal of Hellenic Studies* (1886, pp. 220-39).<sup>2</sup> The oldest dedications are assumed to be those upon two heavy, coarse fragments, found in a well, but in style similar to an amphora discovered under the burnt stratum of the town. These are assigned to about 650 B. C., and are read 'Ωπόλλω σὸ ἐμ, . . . λλω σὸ ἐμ. The writing is retrograde and clumsy, and certain of the characters admit of some difference of opinion as to the letters they represent. The M has three bars in one inscription, four in the other; the supposed *sigma* is irregular and curved. The strangeness of the dedication and of the vocative 'Απόλλω, has led me to query if this *sigma* may not be read as a N, and the E as a *sigma* of a form similar to that which appears at the end of the word 'Ιαλύσιος on the inscription of the mercenaries at Abu Simbel, and upon the well-known Halikarnassian inscription of Mr. Newton, and elsewhere (M, √, F, T, Ψ). If this conjecture be accepted, the language becomes normal ("Of the Milesian Apollo"), and the other dedications cited in its support follow suit. No. 68 shows N turned at an angle of 90 degrees from its usual position, and a distinct N it must be: with this in use a horizontal three-barred *sigma* would be natural. It is evident, at a glance, that there is much fluctuation in the form of these as well as some other letters, and in their position in relation to the horizontal; as indeed is not uncommon in archaic inscriptions. The real point of importance, however, and the distinct contribution toward the history of the Greek alphabet is, that the majority of these inscriptions represent the Milesian alphabet at an earlier stage than has heretofore been known, and that in the oldest examples the Ω occurs in regular use. Much of the argument for establishing the dates of documents in the Ionic alphabet has turned upon the fact that this letter was supposed to have come into use about 550 B. C. At Naukratis, however, it is found one hundred years earlier. This and some other reasons have led Mr. Gardner, with others, to set off the Abu Simbel inscriptions, with their O for Ω, as Rhodian, doubtless allied to the Ionian, and to assign them, with Wiedemann and others, to the reign of Psamtik II instead of Psamtik I. Some inscriptions of this class were discovered among the

<sup>2</sup> [Opposition to Mr. Gardner's conclusions, as well as to those of Mr. Petrie, has been made by Professors HIRSCHFELD and KIRCHHOFF (*Studien*), and arguments on both sides have been brought forward in *The Academy* (1887, May 14, July 9, 16, Aug. 20, 27). The German critics diminish the age of the oldest inscriptions by about a century.]

dedications at Naukratis, as well as some belonging to the Melian alphabet; and No. 2 presents a case where, in a dedication to the Milesian Apollo, there occur together, in the boustrophedon order, Ω, O for Ω at least once, the open H and the four-barred *sigma*. Closed H is found but once, and Gardner places some cases of the open form still earlier, in the seventh century. The closed H at Abu Simbel was used as the vowel, and also as an aspirate. Neither form is employed as aspirate at Naukratis. F does not belie previous experience by appearing, but Ϝ (κόππα) presents itself occasionally before O till about 530 B. C.

Two dedications are of especial interest. The first is upon a large krater of Rhodian ware, assigned to 600 B. C., and reads: *Polemarchos consecrated me to Apollo, together with the prochoos and the stand* (Πολέμαρχος [με ἀνέθηκε τ]ὴν πόλῳνι καὶ τὴν π[ρ]όχων καὶ τὸ ὑπο[κρητή]ριον). The language recalls at once the famous Sigeian inscription, and the krater wrought by Glaukos the Chian, dedicated by Alyattes at Delphi (Herod., i. 25). The British Museum contains a vase, rather badly reproduced in the *Archäol. Zeitung* for 1881 (pl. 13), in whose interior is depicted precisely such a scene of dedication. Upon a stand about three feet high, decorated at the corners with birds, rests the krater, out of which rises a prochoos as if set upon an interior lid of the krater. On one side stands a player on the double pipes accompanying the ceremony; on the other, the dedicator or priest, with bowl in one hand and rhyton in the other, offering the libations. In the field, above, a bird is seen flying down on the right of the dedicator. This bowl is believed to be of Kyrenaian or Naukratian manufacture.

The second dedication that attracts attention is that of Phanes the son of Glaukos,<sup>3</sup> of which the style, place of find, and forms of the letters combine to bring it down to about 530 B. C.; so that the dedicator is very reasonably identified with the Halikarnassian of that name whom Herodotos mentions as in high favor at the court of Amasis till he proved traitor and deserted to Cambyses. The tragic scene of the deliberate slaughter of his children before the father's eyes on the battlefield of Pelousion by the enraged Greek and Karian mercenaries, will ever remain one of the great pictures drawn by the Father of History. The widely scattered positions in which the fragments of the vase were found seem to reflect something of the same spirit at the temple in Naukratis.

After the discovery by Dr. Halbherr of the archaic Code-inscription on the site of the ancient city of Gortyna in Krete, nearly three years

<sup>3</sup> GARDNER'S *Naukratis*, I, p. 55.

ago, the Italian Government granted to the discoverer means to carry on excavations in the immediate vicinity of the wall on which the inscription had been discovered, with the hope of finding additional remains of the same body of laws. This hope has proved fruitless, but the explorer has reaped a considerable harvest elsewhere. At a place called Vigle, about a mile distant from where the Code-inscription was found (but still within the limits of the old town of Gortyna), a peasant, while digging for building-stones, came upon a series of walls. These walls had formed part of a structure, probably a temple, erected at some time posterior, it would seem, to the Roman conquest, but they were composed of large blocks bearing archaic inscriptions, laid up in the wall without any regard to the continuity of the inscriptions. This fact shows that some building of far earlier construction must have been despoiled to furnish material for the one whose remains were now found. The walls of the earlier building were inscribed with a series of public decrees; but, unlike those upon which the Code was written, there is no indication of arrangement in parallel columns, or of grouping as if by stelai. On the contrary, the tendency seems to have been, with few exceptions, to extend the lines to indefinite length, horizontally, for in some cases the letters are about eight inches high and cover only two-thirds of the surface of the stone. It is impossible to suppose that, if the writing had been disposed in vertical columns instead of continuous lines, it would have been inscribed with such prodigality of space, but would have had at least two lines on a block: nor do examples occur where the letters bestride the horizontal joinings of the blocks, as in the writing of the Code. Some of the lines may thus have traversed the whole length of a façade, and even turned the angle, to be continued on the adjacent face, as seems to follow from finding three blocks each bearing an inscription in smaller letters upon which is superposed an inscription in the eight-inch characters. Even where boustrophedon inscriptions occur, they rarely occupy the entire vertical space of the stone. Hence we may certainly assume that we have a varied mass of separate decrees and laws, promulgated on various occasions, and sculptured on the walls of a state edifice in order to perpetuate them publicly; and that they are anterior, in whole or in part, to the formation of a regular code like that previously discovered near the river Lethaios. This seniority will be proved further on, though it would hardly be inferred if rudeness in sculpturing the letters (which occurs in many early inscriptions) were made the standard of judgment. The elegance

and comparative regularity of the Code-inscription has led many to date it as low as the end of the fifth century. But we must distinguish between the rudeness of an untrained hand working upon a mortuary or other comparatively insignificant monument, and the work of an artist who would naturally be selected to perpetuate public enactments on the walls of a stately building where the inscription in bold deep characters would prove a disfiguring or an ornamental addition. Certain it is that the most of these Vigle inscriptions are remarkable for the regularity and neatness of the letters and of their arrangement, which reveal a tendency to the artistic, and the use of an already advanced monumental writing. Few indeed are the technical errors, oversights or corrections of the workman; on the contrary, the writing would for the most part be an ornament to the building. And yet its priority, in the main, to the Code-inscription follows from many considerations. In the first place, the alphabet differs considerably from that of the Code; but here the Vigle inscriptions must be divided into two classes, as Comparetti has clearly shown in his publication of and comment on them in the *Museo Italiano* (vol. II, pp. 181-252). Nos. 82-3-4, forming two inscriptions of eight and six lines each, closely resemble the Code-inscription in the form of the letters, and are identical with it in the letters employed. The others, numbered up to 81, and unfortunately in an extremely fragmentary state, have three additional letters, but all these have their Phoinikian prototypes, namely **I**, **B**, **Φ** (**ϕ**). Beside this, some of the characters are more closely allied to the Phoinikian in form than are those of the Code. And in this formation we must distinguish two general classes, the angular and the curved, in the following letters, **F**, **K**, **Γ**, **P**. By comparison with the oldest Phoinikian, we should expect the angular forms to be anterior to the curved. In the case of the three blocks already mentioned, in which the large letters are superposed on the smaller, **ϕ**, **K** are angular in the smaller, while **K** is curved in the larger. Elsewhere we find the two classes employed indiscriminately in the same inscription. **I** is always curved (**S**), not angular as in early Phoinikian, at Thera and elsewhere. This is also the case with **Γ**, which is angular on the Moabite Stone, but curved at Nineveh and Abu Simbel (Phoinikian), at Thera, Amorgos, etc. In all these instances the curve is at the top, **7**, but in the Code-inscription it has become an arc of a circle, **2**. *Di-gamma* has four different forms, three angular and one curved: **7**, **7**, **7**, **7**. The curved form in this series is regarded by Comparetti as

offering the solution of the problem of the derivation of this letter, it being made, he thinks, from the curved  $\gamma(\pi)$  by the addition of a stroke for purposes of differentiation. On the contrary, I incline to believe that the angular form,  $\gamma$ , is the more ancient, being derived from a Phoinikian prototype resembling that seen in the Siloam inscription,  $\gamma$ , the outside stroke falling away in course of time as  $\gamma$  might arise by a similar disappearance of the interior stroke, if the differentiation was not deliberately adopted at the outset. There is nothing more striking, on glancing over the table of Vigle inscriptions in which the letters are the largest and most regular, than the uniformity and regularity with which not only  $\gamma$  and  $\zeta$ , but also  $\beta$ ,  $\gamma$ ,  $\eta$ ,  $\theta$ , are modelled upon the same curvature. This is carried out to an extent so unprecedented that it seems to me the riot-fancy of some artist imbued with a spirit like that exhibited in the Mykenai productions (and perhaps starting from the common  $\gamma$ ,  $\zeta$ ), rather than a natural growth.<sup>4</sup> In a modified degree this tendency is prevalent in all alphabets, although the curve is more difficult to engrave than the angle. The curved  $\epsilon$ , found once at Thera and often read  $\rho$ , can now be accepted as *digamma* without hesitation. This effort to please the eye with curves readily accounts, also, for the peculiar form of *beta* at Vigle, namely,  $\theta$ , in which it differs from  $\gamma$  only in the greater length of the curve, which is sometimes continued until it forms a curl,  $\theta$ . Its derivation from the more angular Phoinikian,  $\theta$ , is easily seen, and it forms the intermediate link between that and the crescent  $\beta$  of the Kyklades,  $\beta$ . Indeed, our own form of  $\beta$ , which also occurs twice in the Vigle inscriptions, is due to the prolongation and curvature of the lower part till it is brought round to meet the curve of the upper, probably to differentiate it from  $\rho$ .

The  $\eta$  of this class of Vigle inscriptions is uniformly of the closed type,  $\theta$ , and is used for the vowel. In fact, its employment as an aspirate has not yet been discovered in Krete, and this accords with the fact that the archaic alphabet there served its purpose without any of the rough mutes except  $\theta$ , and  $\theta$  it sometimes neglected, as in *κατιστάμεν, ἀνθρώπων, etc.* In the Code-inscription the  $\epsilon$ -sound is represented by  $\epsilon$  alone,  $\theta$  having been discarded, perhaps in the interest of simplicity; although it is found in the open form ( $\eta$ ) in some inscriptions of the immediate vicinity which are otherwise identical

<sup>4</sup> We may compare the sudden change from the angular forms in the Athenian Tribute Lists of the year 450 B. C. to the curved forms in 449 B. C.

with the Code in their characters. The alphabets of the Kyklades, with their varied use of H, throw some light upon this point. Φ (ϕ) before O is uniform in the Vigle inscriptions, even where it stands for X, except in Nos. 82-4, in which the desire for simplification has yielded the whole field to K, as in the Code.

As other points of difference between the two classes, we may mention that the elder employs the perpendicular straight line as a division mark for words or phrases, as also found elsewhere in Krete, Lakonika, Thera, Kypros, and on the Mesa-Stone. This is abandoned in the Code group, which is written in a rigorous boustrophedon order: this also occurs in the Vigle group, though the dominant order is the retrograde. These facts point to a greater antiquity: but the weightiest argument adduced by Comparetti to fix the relative and approximate age of the two groups is, that the elder Vigle group belongs to a period which precedes the use of coined money. Many of the fragments treat of the payment of fines, and these are expressed not in staters, drachmas, and obols, as in the Code, but in *lebetes*, and once, by a reasonable conjecture in supplying part of a word, in tripods (. . . οδα ἐναδ . . .). Beside small numbers, we find the *lebetes* running as high as 20, 50, and even 100; so that they correspond to the staters of the Code, and evidently represent some measure of value. One is at once reminded of the *lebetes* (λέβητες) and *tripodes* (τρίποδες) so common among the lists of gifts in Homer, where the tripod is of greater value than the lebes. These are of copper or bronze, and, arguing from this, Comparetti concludes that we have here large pieces of bronze of definite weight, like the *aes rude* of the Romans, but not yet stamped with an official device that constitutes a coin, and having their names as well as material handed down from the earlier use of actual caldrons. Against the objection that they may have their name from a stamp impressed upon them, Comparetti urges that, while on existing coins we do sometimes find the imprint of a tripod, that of a caldron never occurs; and furthermore that, although the coins of Athens were sometimes called "owls" and "girls," those of Aigina "tortoises," and those of Korinth "colts," these are comic or playful designations, not the official appellation such as would be implied by their use in a public decree, as at Gortyna. Beside this, the oldest known coins of Krete are those of Gortyna, and they present no hint of tripods and caldrons, but Europa riding on a bull, with a lion's head on the reverse, surrounded by an inscription which accords fairly

with that of the Code. Numismatists incline to place this coin at the beginning of the fifth century B. C., but with the acknowledgment that this assignment is made upon very uncertain grounds, namely, artistic style, while we as yet know almost nothing of the development of art in Krete, except from tradition, which habitually represents the island as a very early centre, and as the teacher of continental Hellas.

What then was the period at which coined money was introduced into Krete? Numismatic authorities are quite generally agreed that Herodotos was right, in saying that the Lydians were the inventors of coinage, and place this invention at about 700 B. C. Its introduction into the Peloponnesos by Pheidon is therefore assigned to the first half of the seventh century B. C., instead of the eighth as would follow from the date of Pheidon given by Pausanias. Certain it is that the invention spread rapidly westward from Asia Minor, and was caught up quickly by the Islanders; and it is incredible, from what we know of the advancement of Krete in the seventh century, that she should have been far behind the other Greeks in welcoming this boon to commerce. Her standard was the Aiginetan, and, if she obtained it after the Pheidonian regulations in the Peloponnesos had made it famous, the older Vigle inscriptions would naturally fall within the second half of the seventh century, when, as we have seen, the Ionic alphabet in its fullest development was in use at Naukratis. Comparetti maintains that the Code-inscription is naturally coeval with the change to a fixed coinage; that the new relations required much readjustment; that the official introduction of the new terms—staters, drachmas, obols—with possibly some alteration in the standards of weight, would have demanded a revision of the laws to introduce the new nomenclature, and a restatement of the fines; and that, consequently, advantage was taken of the opportunity to gather up the various enactments already written on the building at Vigle, to reduce them to a systematic form, with a simplified alphabet, uniform boustrophedon order, and to record them all within a definite space. Most of the Vigle inscriptions are so fragmentary that it is impossible to determine their substance, but we can see that the subjects of adoption and of succession to property form a part, as in the Code. Comparetti well compares the lawgiver's task here with that of Solon in relation to the laws of Drako. Solon introduced coinage, which before had not existed in Attika, and altered the fines, which had been expressed by Drako in oxen and sheep, into the denominations of the new coinage; and it is to about this time that

Comparetti would assign the Code in Krete. One objection, which he did not perceive, may be urged to Comparetti's argument. He assumes that the current money at the introduction of the Code was bronze: but the Code speaks only of silver, and the language used intimates that silver had been in regular use in transactions which preceded the adoption of the Code. But, as the numismatists believe that Aiginetan money had been employed at Athens as a currency for a considerable period before Solon began to issue a native coinage, so we may readily account for the expressions of the Code by supposing a similar use of Aiginetan coins, gradually introduced for a generation or more prior to the establishment of a mint at Gortyna.

Inscriptions so fragmentary as these must necessarily be interesting mainly to the student of language; but the two which have the same alphabet as the Code are complete enough to yield some sense. One is a decree relating to freedmen, who are granted permission to settle in Latosion upon an equality of rights with its inhabitants. Latosion therefore would seem to be some suburb of the town given up to resident strangers, or metics, in the vicinity of a temple of Leto. No one shall reënslave one of these freedmen, and, if the attempt should be made, it shall be the duty of his bondsmen to rescue him, and the *praetor peregrinus* (τὸν κσένιον κόσμον) shall not have power to release him from their custody. If the bondsmen do not perform their duty of rescue, they shall each atone to the freedman in one hundred staters and double the amount paid for his freedom. In case they do not fulfil these provisions, they shall be subjected to a double fine, which shall go to the informer and to the city. It is noticeable that the word, here, for bondsman is τίται, which has heretofore been known only from Aischylos (*Choeph*, 67) as "the avengers," and so corresponds closely to the Latin *Vindices*. No punishment falls on the one who seeks to reënslave: it is the bondsman who is held responsible, and this is a general principle in Greek law. The second decree grants immunities to a certain Dionysos for services to the city.

These decrees coincide with the Code-inscription not only in their alphabet, but in their orthography. The abandonment of Z has led to the attempt to express this sound by δ, δδ, as κατοικίδεθαι. The termination -θαι in the same word is characteristic of the Code group: in the elder it would be -σθαι. Further differences between the elder Vigle and the Code group may be noticed as follows: Vigle, Ι (ξ) for ττ or σσ, as ἐδίκασε (aor.; Code, ἐδίκασε), ἀνδάξαθαι (Code,

δάττωνται), ὄζοι (Code, ὀ-πόττοι), ζῶωι (Code, δῶός); *υ* in the diphthongs *αν*, *ευ*, *ου*, regularly written with the **F**. In the later Vigle decrees, Ἀ**F**λῶνι and ἐ**F**αδε (Hom., εὔαδε) occur, but also τούτων. This phenomenon of **F** for *υ* occurs once in a Naupaktian inscription (Να-**F**πακτίων), and once in a Korinthian, ἐ**F**θετος. The much vexed ἀ**F**ντοῦ on the base of the Naxian colossos at Delos, obtains some comfort from a doubtful ἀ] **F**ντάν, and a certain ἀμε**F**ύσασθαι of the elder group. The Homeric ἀγχέμαχος receives support from ἀγχέμολον; and the relative ὅτειος, found in the Code, gains further confirmation. As Doric inscriptions posterior to the introduction of the Ionic alphabet vary in the use of the vowel E and H in the termination of the present infinitive of verbs in -έω (E is most frequent), it is interesting to see that the archaic orthography in the Vigle monuments, where H was also in use, is uniformly E, although in Comparetti's minor inscription from the Lethaios, published at the same time as the Code, we find καλῆν, but also δόμην and ἤμην. Finally, at Vigle occurs the nom. **F**αρήν (gen. ἀρνές) whose **F** has been assumed, but never before proved, to exist.

Beside the Vigle inscriptions, Comparetti publishes also, in the same number of the *Museo Italiano*, several inscriptions of archaic type, gathered by Halbherr from Oaxos, Eleutherna, and Lyttos, all within a radius of 30 miles from Gortyna. The alphabet of Oaxos contains the same letters as that of Vigle, except Φ (Φ), but conforms to the angular type throughout, even in Γ and Ι (Ι), and has a peculiar form for **F**, hitherto unrecognized and resembling the letter N slightly varied, **Λ**. In fact, some coins, hitherto assigned to Naxos, have been restored to Oaxos by Halbherr, in consequence of the discovery of these inscriptions. This character (**Λ**) is doubtless the same that has also been found on Pamphylian coins, in the form of a reversed N (**W**). Some interesting words occur: *ιν* for *έν* with dative only, and in composition, not with accusative also, as in Arkadian and Kypriote; it is used before consonants as well as vowels: *ιςς* and *ις* stand with the accusative. The infinitive termination -σθαι becomes -σται, as in Elis, Boiotia, and Northern Greece generally. With this we may compare, ἀμίστως, μιστώ, for ἀμίσθως, etc.: ἀντρηίωι for ἀνδρηίωι exhibits a rather rare change: σπο**F**δδάν for σπουδήν is a use of the **F** which we have seen at Vigle: ἀβλοπία confirms the gloss of Hesychios, ἀβλοπές, ἀβλαβές· Κρήτες—a similar interchange of π and β is noticed by Plutarch as Delphian.

The neighboring Eleutherna furnishes the same angular alphabet, with the same form for *digamma* but with the H enclosed by two bars instead of three (H), as not unfrequently among the Phoinikians; and E with two horizontal bars (E), which is also Phoinikian at times. Here likewise the F takes the place of *v* in the diphthongs *av, ov*; but we find ἀμισθεί. In one fragment, where the sense is not clear, Comparetti presents the word δισυροποιῶνι: the following gloss of Hesychios is worth weighing: ὕρον, σμῆνος · Κρήτες.

The alphabet of Lyttos, which is boustrophedon like those of Oaxos and Eleutherna, has I (S) and Γ (C) curved as in the Code, and one of the two fragments bears the closed H, the other the open. Blass's reading of the pronoun *δτερος* twice in the Code is here confirmed by the appearance of the word between division marks.

It is interesting to see, here, how truly Greek individuality asserted itself, even in the matter of alphabets, within this narrow circle of neighboring towns, but it is not unprecedented.

The alphabet of Amorgos has also received an addition in the direction of greater antiquity, as it would seem. This alphabet presents so great a variety in the archaic inscriptions which have reached us, that it is difficult to reduce it to order. Hitherto it has kept within the bounds of the Ionic, and has thus confirmed the notice of Suidas, that the island was colonized in the XXIX Olympiad, 664-60 B. C., by Samians under the leadership of the Iambic poet Simonides the Elder. F. Dümmler, however, has recently published, in the *Mittheilungen* (1886, p. 98), a rock inscription in which we find the Doric *san* (M) instead of the Ionic *sigma* (Σ), Π curved at the top (Π), and a degenerated form of the broken *iota* (ι) in one case and the straight form (I) in another. The direction is retrograde, and H is closed (H). But the form of the name, Δηιδάμας, is Ionic, and we may therefore compare it with the Bubon inscription found at Olympia, and assigned by Roehl to Euboea, with the remark that it surpasses all other Ionic inscriptions in antiquity because it uses *san*. We may at least acknowledge the influence of other alphabets with the early Ionian colonists, and Ross long ago suggested relations with Argos. Indeed, Dümmler publishes another retrograde inscription, fully Ionic, with open H and with Ω, in which Ξ is turned upon its side (H), a position which is peculiar to Argos.

The recent excavations upon the Akropolis at Athens, which have added so much to our knowledge of the art that preceded the Persian

invasion, have not been barren of inscriptions. Several of the columns and other constructions, which originally supported offerings of statues and different objects, were inscribed, to designate that fact, in letters that are so regular that they form an artistic addition to the objects themselves, besides giving the information desired. They have been published by Kabbadias, Director of Excavations in Greece, in the *Ἐφημερίς Ἀρχαιολογική*, 1886. Their value consists in the contribution which they make to the scanty literary notices of early artists. One, which lacked about half its length on the right, has been ingeniously restored by C. Robert (*Hermes*, 1887, p. 135), as follows:

ΝΕΑΡΧΟΣ ΑΝ ἔθηκεν ὁ κεραμε  
ΥΣΕΡΛΟΝ ΑΓΑΡΤΕΝ Τὰ θεναίαι  
ΑΝΤΕΝΟΡ ΕΓΟΙΕΣΕΝ Η  
ΟΕΥΜΑΡΟΣ ΤΟ ἄγαλμα

Nearchos the potter was already known from a black-figured vase bearing his signature, found on the Akropolis, and also from the signatures of his sons Ergoteles and Tleson, the latter of whom is represented by 34 vases found in Italy. Antenor was the sculptor of the famous group of the Tyrannicides, Harmodios and Aristogeiton, which was carried off by Xerxes to Persia and finally restored to Athens by Alexander or one of his successors in the East. The father, Eumares, is identified with the painter Eumarus of Pliny (xxxv. 56), who describes him as the first to distinguish between man and woman in his paintings, and as the successor of the monochrome painters. His date has already been set by Winter (*Arch. Zeit.*, 1885, p. 200) at about 550 B. C., and with this our inscription readily accords.

At the very forefront of Greek sculpture, Pliny (xxxvi. 11) places the Chian family of Melas, his son Mikkiades, his grandson Archermos, and his great-grandsons Bupalis and Athenis. The last flourished, as he says definitely, in the LX Olympiad (540 B. C.) and were lampooned by Hipponax, as some related, till they hanged themselves from chagrin, a story which Pliny does not believe. This date would bring Archermos into the early part of the sixth century. Pliny knew of many statues of his at Delos and elsewhere, and a scholiast on Aristophanes (*Av.*, 574) ascribes to him the first representation of Nike with wings. In 1880, Homolle discovered at Delos a part of the base of a statue with an inscription intimating that the statue was the workmanship of Archermos and his father Mikkiades. Later on, another portion

was added to the base showing that it was a dedication to the Far-darter. Near by, was discovered an archaic winged statue which was believed to have occupied the base, and to represent the winged Nike, or possibly Artemis. While Kabbadias was carrying on his excavations on the Akropolis, last July, he lighted upon the fragment of a column bearing an inscription to the effect that the offering was the workmanship of Archermos the Chian (. . . "Αρ]χερμος ἐποίησεν ὁ Χι[ος | - - ἀνέ]θεκεν Ἀθηναῖαι πολίόχο[ι]). One of the statues excavated in the vicinity differs from the others, and bears a foreign air: Kabbadias conjectures that this was the veritable offering from the hands of Archermos, and draws the conclusion that Archermos either worked in Athens, or that statues from his workshop in Chios found their way immediately to Athens. This, if true, is indeed a noticeable fact, as he says (*Εφημ. Ἀρχ.*, 1886, p. 135); but, when we examine the characters of the inscription, we should say that they belonged to the close of the sixth century rather than toward its beginning. They are very regular and handsome, strikingly different from those of the Delian base, and are characteristically Attic, with two notable exceptions. The *sigma* is the Ionic with four bars (Σ), and the *lambda* also Ionic with a short bar at the top (Λ). Such intrusion of Ionic letters is not unprecedented, especially where the artist is Ionian; but this has hitherto been confined to the post-Persian period at Athens, while this column must antedate the destruction of the city by the Persians. Another Ionicism is the absence of the aspirate with the article ὁ, though the dialect is wholly Attic. Furthermore, the *theta* has the dot in the centre, not the cross, and this form appears in monumental inscriptions at Athens and in Ionia at about the same time, so far as is known, namely, just before the close of the sixth century. Hence, it is safer to suppose that the Archermos of the Akropolis is either a grandson of the earlier one, or at least that the inscription belongs to the waning years of his century, although it must be added that the *theta* with point is found on coins of Athens which produce the impression of greater antiquity than any with the bar-*theta*, and are ascribed by Head to the Solonian period, while other numismatists bring them down to the Peisistratidean.<sup>5</sup>

<sup>5</sup> Since the above was written, PETERSEN's article in the *Mittheilungen*, 1887, p. 372 (*Archaische Nikebilder*), has been received. He accepts the attribution to Archermos, and says that the letters are actually more archaic in form than they appear in the fac-simile.

A third dedication published by Kabbadias from the same finds is inscribed, like the others, upon a base, and consists of two parts, the dedication proper to Athena by a certain Onesimos, and the mutilated name of the artist above, of which sufficient remains to render the reading *Theodoros* certain. Kabbadias thinks this Theodoros to be the famous Samian artist, to whom the invention of bronze-casting is ascribed, and who worked in Sparta, building the structure called Skias. A bronze head larger than life was among the results of the excavations near the place where this base was found, and Kabbadias inclines to regard it as the work of Theodoros consecrated by Onesimos. Little can be urged against this on the score of epigraphy, if the activity of Theodoros be allowed to cover the first quarter of the sixth century, as is probable. The dedication of Onesimos is pure Attic, and might easily belong to the period of Koehler's Salamis Klerouchia-decree, which he dates at about 570. It is noticeable that in the name Theodoros the Ionic four-barred *sigma* is employed.

The name of the poet Aischylos in an inscription attracts the attention of all. Last February, a stone was found on the Akropolis stating that Aischylos produced a play in the archonship of Philokles, and that Xenokles of Aphidna was the *choregos*. The play, we know from the *Didaskalia*, was none other than the Oresteian trilogy, and, although nothing is added to our previous information by the inscription, it is still interesting to find the *Didaskalia* confirmed, and it stirs the heart to feel that one more link binds us to that sublime production to which the *Agamemnon* belongs.<sup>6</sup>

The chances of destruction which wait upon important memorials are well illustrated by the fortune of an inscription from the Peiraieus, which has been treated by Foucart in the masterly manner that characterizes all his productions (*Bull. Cor. Hellen.*, 1887, p. 129). During the latter part of last year, the owner of the property on which was built the fort of Eëtioneia, on the west side of the harbor of Peiraieus, leased it to a contractor as a quarry for building-stones. A considerable part of the wall was thus destroyed; but, while the work was in progress, it chanced to be visited by a lieutenant from a French frigate

<sup>6</sup> The forms of the letters assign the inscription to the latter half of the fourth century B. C., and they are the same in form and size as those of some fragments already published in *C. I. G.*, II, 971, in which mention is made of a victory gained also by Aischylos, with Perikles as *choregos*. The conjecture that these all belong to a redaction of the *Didaskalia* by Lykurgos is very reasonable.

lying in the harbor, who wished to examine the ancient fortifications. While looking over the ground and the stones brought to light from the wall, he noticed two that had a part of their surface smoothed into a regular square which had been inscribed. He called Foucart's attention to them and thus preserved them from probable loss to science. The first was to this effect: *In the archonship of Diophantos (395-4 B. C.), month of Skirophorion (June-July), for work by the day, pay for cattle drawing the stones, 160 drachmas.* The other says: *In the archonship of Euboulides (394-3 B. C.), beginning from the Signal up to the front of the gate by the Aphrodision, on the right as you go out, 790 feet: contractor, Demosthenes the Boiotian; also to haul the stones.* From these apparently insignificant facts very important results are obtained by Foucart, aided by the fortunate mention of the dates. It was in the year of the archon Diophantos that the Thebans, after the visit of the Persian agent to Greece, formed their alliance with the Athenians against the Lakedaimonians; and the death of Lysander under the walls of Haliartos caused the extension of the alliance until it included all the Boiotians, the Argives, and the Korinthians. Before the end of this archonship the forces of the confederates had gathered at Korinth. In the early part of the archonship of Euboulides the battle of Korinth was fought, Konon gained his naval victory at Knidos, and Agesilaos fought at Koroneia. In the following spring (393 B. C.), Konon arrived at Korinth at the head of the Persian and Greek fleet, and thence proceeded to the Peiraieus, where he set to work to reconstruct the Long Walls and those of the Peiraieus, with the aid of his crews and the money furnished by the Great King. Xenophon (*Hel.*, iv. 8) adds that the Boiotians and other cities voluntarily assisted in the work, and Diodoros (xiv. 85) testifies to the same effect. To Konon therefore is habitually conceded the glory of reërecting the walls destroyed by Lysander; but our inscriptions show that the Athenians had already begun the task the year before, encouraged by the alliance with the confederates, and quickened by the danger of a Lakedaimonian invasion, to which the Peiraieus was particularly exposed, as indeed Thrasyboulos openly declared to the Theban envoys when seeking the alliance (*Xen. Hel.*, iii. 5, 16), a reminder which will readily account for the presence of a Boiotian contractor in Attika.

The gate mentioned in the second inscription can be identified at the northern extremity of the western wall, where it turns abruptly to the east. Within this, and near by, must have stood the Aphrodision of

the inscription. But the only Aphrodision hitherto known in the Peiraieus was built by Konon, out of gratitude to the goddess for his Knidian victory, and this was situated on the opposite side of the harbor, near the present custom-house, and was probably not begun till some months after our contract was recorded. Mention of an older Aphrodision, founded by Themistokles, has indeed been made by a scholiast on Hermogenes, but he has been believed to be confusing Themistokles with Konon, and no credence was given him. Now he may be rehabilitated. The existence of an Aphrodision in Eëtionia gives Foucart opportunity for a new interpretation of the scholiast on Aristophanes, *Pax* 145, and a readjustment of the topography of the Peiraieus. The scholiast says, "The Peiraieus has three harbors, all closed: one the so-called Kantharos, then the Aphrodision, then five stoai about the harbor." These three harbors are usually placed all on the south and east side of the port, the Aphrodision between the other two, without any distinct harbor to which it could give name. Foucart now removes it to the west side, extending it from the entrance up to the northern limit, with the Kantharos, as before, on the right of the entrance, and the five stoai stretching along the east and northern shore. This interpretation relieves the passage of its difficulties, removes the necessity for the various emendations which have been proposed, and simplifies the topography of the Peiraieus.

This leads us naturally to two important architectural inscriptions which add much to our inadequate knowledge of details. One from Eleusis has been published by Philios in the last number of the *Ἑφημ. Ἀρχ.* for 1886, and contains, like that of the Athenian naval arsenal of Philon found near Peiraieus in 1882, the specifications for the construction of a large building within the sacred precinct, presumably a temple, but by what name it is to be designated is left in doubt, possibly by reason of the losses at the side of the stone, though in length the inscription amounts to 195 lines. The *Telesterion* designed by Iktinos would naturally have been completed before this document was engraved, and its architects, three in succession as named by Plutarch, are different from the Philagros mentioned here. A board of overseers act in conjunction with the architect, but the contracts are to be filled in accordance with the plans and drawings which he may furnish. The stone used is partly from Aigina, the Peiraiean Akte, and Eleusis, but very largely from Pentelikos; it must be delivered in the precinct sound and whole and white, without spot or blemish. The dimensions

of the blocks and their number in each series are detailed with great minuteness. Each contractor must supply his own material except in the case of the iron and lead for securing the blocks in place, and these are furnished by the state.

Of far greater interest is the document published (likewise in the *Ἐφημ. Ἀρχ.* for 1886, p. 145) by Kabbadias from his excavations at Epidauros, in which we have, given in very complete form, the contracts assumed by different persons for the construction of the temple of Asklepios within the famous precinct. It contains none of the specifications for the manner in which the work is to be executed, or of the kind of stone to be used, such as the Eleusinian slab embodies solely. These probably existed upon another stone and are here taken for granted. In the well-known inscription relating to the Erechtheion (*C. I. A.*, I, 324) the moneys paid are chiefly for work by the day; but here, as at Troizen, Hermione, Lebadeia, etc., various parts of the construction are awarded to contractors, and in this case to the lowest bidder, as would appear from the amounts paid, which are seldom in round numbers. For instance, Demochos supplies timber for 299 drachmas and 5 obols, just one obol below the round number 300. Each contractor furnishes one or more bondsmen according to the amount of his contract. The bondsmen are native Epidaurians and only designated by name; the contractors mostly foreigners, Korinthians and Argives, as appears often to have been the case in small towns. At Athens, contracts are habitually taken by citizens, and the presence of the Boiotian as mentioned above at Eëtioneia is due to the exceptional circumstances. The Korinthians engage especially, though not exclusively, to quarry and transport the stone. For example, Loukios the Korinthian contracts to quarry and draw the material for the stoa at 6300 drachmas, Sotadas the Argive to construct it for 3068. Euterpidas the Korinthian quarries and draws for half the naos at 6167 drs., Archikles the Korinthian quarries the other half for 4400, and Loukios draws it for 1600. An Argive constructs the whole naos for 3200. Polemarchos the Stymphalian paints the stoa by the encaustic process for 1050 drs., Loukios the Korinthian furnishes the pine for 4390, and Tychamenes the Kretan the cyprus; while elm, lotos and boxwood were used for the doors. A substantial workshop is constructed under similar contracts, reminding us of the famous workshop of Pheidias at Olympia.

From the excavations, we know that the temple was peripteral, with

six columns at each end, eleven at each side, with naos and pronaos, but no opisthodomos. The sculptures in the eastern pediment represented the conflict of the Kentaurs and Lapiths, in the western that of the Amazons. Rich akroteria in the shape of winged victories crowned the summit and corners of the roof. Portions of all these have been found. The dimensions of the ground-plan were about 43 by 82 feet. In addition to the details already given, we have contracts for the foundations, the stylobate, the prodomos, the pavements, the roofing, the pediments, the sculptures in the pediments, and the akroteria. There is a singular discrepancy in the cost of the sculptures of the two pediments, one amounting to 3010 drs. and the other to 1400 only. The parts painted are the stoa, the naos, the akanthai, parts beneath the beams, serpents on the gorgoneion and the lion-heads on the cornice. It is probable, from other remains of Doric architecture, that the painting of the stoa and the naos was confined to the upper parts. Two doors led into the prodomos, and one large one from there into the naos. The last was an elaborate affair. In addition to the wood and other materials employed in its construction, ivory is contracted for to the amount of 3070 drs., and the gluing amounts to more than 2600. Gilding ornamented the kymatia, the astragals, rosettes and stars, and a golden choros cost more than 1000 drs. The walls, columns and pavements were all smoothed and polished after erection, and a general cleaning of the naos was contracted for at the completion of the building. The work appears to have lasted three years, eight months and ten days, as the architect Theodotos is paid for that length of time in five separate instalments, three yearly, the fourth for six months, and the last for 70 days. His pay is 353 drachmas for the year, or one drachma a day, which is the usual rate at Athens in the fifth century B. C., though it runs up to two toward the close of the fourth. Our inscription belongs to the first part of the fourth century. Theodotos has no less than six bondsmen, although but three are required for the largest contract awarded, amounting to 9800 drachmas. During the third year Dorkon appears to have been appointed as assistant to Theodotos, and was paid 350 drs. Beside the definite contracts, from which we have taken selections only, there are many items of minor expenditure for work done and services rendered, in which the payments are made direct. One of these may possibly refer to the cost of the inscription itself: Eudamos receives 20 drs. for making a stele, and Paseas 49 drs. 1 obol for cutting and painting an inscription (*γραμμά-*

των ἐνκολάφιος κένκαύσιος). Several new words occur, architectural terms, naturally, and *ἀνευ* for *ἀνευ* is written once, and is probably to be supplied later on, where Kabbadias reads *ἀ[νευ]*, in the same phrase: we may compare the Elean *ἀνευς*. In speaking of the Kretan inscriptions, we have already remarked upon the strong individuality of closely neighboring towns as exhibited by the different characters which they severally employed. This is exemplified in Argolis by the signs used to designate numbers. Hermione and Troizen were already known to differ materially in this respect; and now Epidauros presents a third system of notation, in part wholly unknown elsewhere in Greece. Though they had already accepted the Ionic alphabet, they still clung to their earlier notation in which the sign for 100 is the closed H.

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New York City:  
June, 1887.

## A SILVER PATERA FROM KOURION.

[PLATE XXX.]

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In describing the famous patera from Palestrina, and being puzzled for an explanation of its central medallion, M. Clermont-Ganneau remarks:<sup>1</sup> "Thus far this patera from Palestrina is unique in its class. But it seems to me more than probable that some day in some quarter of the Mediterranean there will be discovered a repetition of it, either exact or more or less complete, with variations which may throw light upon the question of its interpretation." Such a replica has been recently discovered among the treasures from Kourion,<sup>2</sup> and is now in the Metropolitan Museum of New York. It is not an exact repetition of the Palestrina patera, but a strikingly similar production with just such variations as we are accustomed to find in Phoinikian workmanship. This patera from Kourion is a more highly finished work of art, with more elaborate bands of ornament, an inner zone of more significant design, and a central medallion which may throw some light upon the question which M. Ganneau leaves unsettled. Unfortunately, it is not in a very perfect state of preservation: the ornamental band inclosing the central medallion is entirely gone, as is also the greater portion of the lower zone. But enough remains to give us a sufficiently clear impression of the central medallion and of the figured narrative of the upper zone. These designs are hammered and en-

<sup>1</sup> *La Coupe Phénicienne de Palestrina*, p. 152.

<sup>2</sup> CESNOLA, *Cyprus*, p. 326: "In the preceding room the various articles lay scattered over the floor, but in this room [Room D of the temple] they were found along the curve of the eastern wall, placed upon a kind of ledge about eight inches above the pavement, and hewn in the rock all around the wall. The vases were standing by themselves; the sixty bracelets were in three heaps, and also apart from other objects; the bowls and dishes were found stacked one inside the other in nine stacks, the top one in each case containing earrings, rings, amulets and fibulae. The bowls and dishes have suffered most, several of the latter being so much oxydized as to make it impossible to separate them, since the silver would fall into dust at the first touch." Through very skilful cleaning by Mr. Balliard, this surface-oxydation has been removed and the design of our patera clearly brought to view.

graved on the inner surface of the patera, nothing being visible on the outer surface but rough patches of oxydation. In shape it resembles the pateræ found at Nimrûd;<sup>3</sup> being a little deeper toward the outer edges and flatter-bottomed than the Palestrina patera.<sup>4</sup> Its dimensions are: diameter of the opening,  $8\frac{1}{2}$  ins.; breadth of the upper zone, 1 in.; height, about  $1\frac{1}{2}$  in.; ornamental bands,  $\frac{1}{4}$  in. and  $\frac{1}{2}$  in. For obvious reasons, the breadth of the lower zone and central medallion, as well as the height, cannot be given with exactitude. In color, the patera presents only the rusty brown of oxydized metal, though here and there in small spots we can even yet detect a glimmering remnant of the silver.

*The Central Medallion.*—The composition of this central scene is not completely preserved. We see only an Egyptian king or hero brandishing his mace with his right hand, and extending his left over the heads of three suppliant figures. Back of him is an attendant, holding a strange object like a short staff surmounted by a circular disk. Above are portions of the wings of a bird. We are not without means of filling in additional details, as there are several other pateræ in which this group is represented. We find it, for example, in a second patera from Palestrina,<sup>5</sup> which we shall have occasion to refer to as the Eshmunjaad patera; and again in a patera from Salerno.<sup>6</sup> Both of these contain rather more elaborate compositions than are likely to have found place in our medallion, and the vacant spaces are filled in with cartouches and other ornaments which here seem to have been omitted. In both of the pateræ from Italy the left hand of the figure back of the king clutches a victim by the hair; this figure is certainly absent in our patera. Both contain an additional figure<sup>7</sup> to the right of the suppliants. There seems to be no room for such a figure, and, besides, we find no trace of its existence, for the lines above the hands of the suppliants seem to be mere scratches. In both of these pateræ from Italy we also see, between the legs of the central figure, a small lion, and further down, separated from the entire scene by a band

<sup>3</sup> See especially LAYARD, *Monuments of Nineveh*, Second series, pl. 59.

<sup>4</sup> The shape is given, somewhat differently, in *Mon. d. Inst.*, x, pl. 31, fig. 1<sup>a</sup>; and CLERMONT-GANNEAU, *op. cit.*, pl. I (*Journal Asiatique*, 1877).

<sup>5</sup> The patera which bears the inscription *Eshmunjaad-ben-Ashto*; figured in *Not. d. Scavi*, 1876, tav. II; *Mon. d. Inst.*, x, pl. 32; *Gaz. Arch.*, 1877, pl. 5; PERROT and CHAPIEZ, *Hist. de l'Art*, III, fig. 36; *Corpus Inscr. Semit.*, fasc. III, pl. XXXVI.

<sup>6</sup> Figured in *Mon. d. Inst.*, IX, pl. 44.

<sup>7</sup> In the Eshmunjaad patera, a figure of Horus; in the Salerno patera, of Isis.

of hieroglyphs, a crouching figure. The lion or the crouching figure may have appeared in the Kourion patera; but that they were probably absent may be gathered from the examination of a Kypriote patera from Kition,<sup>8</sup> now in the Louvre. Here, as in the case of our Kourion patera, the artist utilizes the group of the king vanquishing his enemies for the central medallion of a patera with two<sup>9</sup> zones of figured ornament. He consequently simplifies the composition by the suppression of unnecessary or inconvenient details. It is therefore to the Kition patera that we look chiefly for the restoration of our medallion. From it we may fill out the following details. (1) Complete the central figure, by adding two plumes between the uræi of his headdress; the royal necklace about his neck; the schenti over his loins; possibly the outer cloak showing itself under the left arm and between the legs; and the bow and arrows in the left hand, which also grasps the hair of the suppliant prisoners. (2) Complete the figure behind the king, by adding the captive thrown over his right shoulder, the long spear in his right hand, one or two plumes on his head. (3) Complete the three suppliants, by posing the figure nearest the spectator according to the Eshmunjaad rather than the Kition design. (4) It is not easy to reconstruct the exact position of the winged disk or hawk above. The lines would seem to indicate a hawk extending a plume over the king's head, as in the Eshmunjaad patera, but in the opposite direction. This would have been done without crowding the space above the suppliants. The main difficulty is that the lines representing the plume are much too large. More probably, as in the Kition patera, there was a winged disk over the king, and a Horus-hawk above the suppliants. The hawk would then supply the place of the hierokephalic Horus. The difficulty again is to reconcile this with the peculiar direction of the plumage lines. (5) Below the group place a horizontal ornamental band, and leave vacant the space between it and the circumference of the medallion.

This restoration may be still further substantiated by the similar treatment of the same group on the outer zone of a patera from Kourion,<sup>10</sup> now in the Metropolitan Museum, New York. The central medallion of this patera represents an Assyrian royal figure stabbing

<sup>8</sup> Figured in *Mus. Nap. III*, pl. XI; also in CL. GANN., *op. cit.*, pl. III; PERROT and CHAPIEZ, *Hist. de l'Art*, III, fig. 270.

<sup>9</sup> The Eshmunjaad and Salerno pateræ have only one figured zone, and have larger central medallions.

<sup>10</sup> Figured in CESNOLA, *Cyprus*, p. 329; CL. GANN., *op. cit.*, pl. IV; *Rev. Arch.*, 1877, pl. I; PERROT and CHAPIEZ, *op. cit.*, III, fig. 276.

a lion. In contrast with it, our patera presents us with an Egyptian conquering his enemies. May not this suggest to us that these pateræ were produced at a time when foreign rulers alternately gained the upper hand in Kypros? The composition of the group on our medallion was not an invention of the Phoinikian metal-worker. It was a favorite Egyptian mode of representing a victory, especially from the time of the Ramessides. In the sculptures of the twenty-fifth dynasty, we find this group recording the victory of Taharqa (Tirhakah) over the Assyrians.<sup>11</sup> In the very next dynasty, Apries conquered the Kypriotes at sea, and Amasis<sup>12</sup> brought this island under subjection. As it is probable, on other grounds, that the pateræ we have mentioned were made about the middle of the sixth<sup>13</sup> century B. C., we cannot be far wrong in connecting our medallion with the fact of an Egyptian conquest. Turning now to the Palestrina patera, so ably described by M. Ganneau, may we not carry with us a little light for the interpretation of its central medallion. The man with his arms attached to a post behind his back is not unknown to us. He is to be found on Egyptian reliefs and paintings, represented as a foreigner, an Assyrian, an Abyssinian, etc., and is used, notably in the industrial arts, for the decoration of thrones, handles of vases,<sup>14</sup> etc. So common was it, in fact, that we find it reduced to hieroglyphic form, as a determinative of the word *smau*,<sup>15</sup> "to kill." In the Palestrina patera it is still a bearded Assyrian who is thus consigned to subjection or to death, while the triumphant Egyptian with his long lance occupies the centre of the field. It looks as if the artist sympathized with the conquered people, for the conqueror is represented without the insignia of royalty, while beneath him is a dog or a jackal instead of a lion. M. Ganneau has already observed the Assyrian character of the man linked to the post, and the Egyptian character of the conqueror; but he looks for some narrative connection with the scene upon the upper zone of the patera, or thinks it may be a meaningless fragment of some undiscovered compo-

<sup>11</sup> WILKINSON, *Ant. Egyptians*, III, fig. 601.

<sup>12</sup> HERODOTOS, II, 182.

<sup>13</sup> The Eshmunjaad patera is decorated with hieroglyphs, which, according to MASPÉRO, show no sign of a later origin than the XXVI dynasty (*Gaz. Arch.*, 1877, p. 16). For an excellent enumeration of the pateræ and résumé of the epigraphical evidence as to the period to which they belong, see DUMONT and CHAPLAIN, *Céramiques de la Grèce propre*, pp. 112-32.

<sup>14</sup> See PRISSE D'AVENNES, *Hist. de l'Art Égypt.*, plates entitled "Art Industriel"; also MASPÉRO, *L'Archéol. Égypt.*, fig. 261.

<sup>15</sup> WILKINSON, *Ant. Egypt.*, III, fig. 604.

sition. We look upon it as a detached composition, sufficiently complete in itself, and intended to convey an impression in contrast to that conveyed by the upper zone. The upper zone says to us, The Assyrian has triumphed over the wild forces of nature: the central medallion replies, Yes, but the despised Egyptian has triumphed over him.

Before we turn to the remaining designs, we have still to ask ourselves, What is the strange object carried in the hand of the attendant? There are two Kypriote monuments which throw light upon this question. One of these is the other patera from Kourion, where the same group is represented on the outer zone. In this case, the disk-like object is distinctly marked with branches, giving us a conventionalized tree.<sup>16</sup> The other is the Kition patera already mentioned. Here the distinct branches have disappeared, and concentric lines of pearl ornament are substituted in their place. There can be no doubt that, in this instance, the attendant behind the king carries a branch or tree, for, in the outer zone of the same patera, three trees are represented in precisely the same way. In our patera from Kourion, the trees in the outer zone are expressed in a compromise-method: the main trunk, by lines; the branches, by rows of pearl ornament: while the object held by the attendant has lost every indication of branches, and presents even the outward form of a tree in an exaggerated way—it has reached the stage of being a mere circular disk filled with cross-hatched lines and mounted upon a stem or handle; a mysterious object inviting all sorts of interpretation.<sup>17</sup>

*The lower zone.*—The adjoining band in the Palestrina patera consists of a procession of eight stallions, over each of which fly two birds. In our patera, we see a more significant procession, involving human figures. We can make out three musicians, parts of two or three standing or walking figures, the head and arm of a figure holding a lotus flower, and the parasol which probably protected a chariot. Beside these figures, there remain only a few mysterious lines, which we leave

<sup>16</sup> On the pedestal of a statue of Herakles from Golgoi, Eurytion, who drives the cattle of Geryon, carries in his arms a well-defined tree (CESNOLA, *Cyprus*, p. 136; *Rev. Arch.*, 1872, pl. 21). On a red-figured vase, reproduced by CL. GANN. (*op. cit.*, pl. vii), Herakles with his club replaces the conqueror; the triple-headed Geryon, the three suppliants; Athena with extended arm replaces Horus; and Hermes, with his wand and a branch, the attendant.

<sup>17</sup> Similar disk-like objects with handles are found upon some of the Hittite sculptures. M. Perrot explains these as *paterne* (!), as if *paterne* were usually carried on sticks: PERROT and CHAPIEZ, *Hist. de l'Art*, IV, pp. 550, 556; figs. 278, 280.

unexplained. Again we must resort to other pateræ to help us in our restoration. But, unfortunately, we know of no other which gives us precisely this scene. In a silver patera of the Egyptian style from Golgoi<sup>18</sup> we find the three musicians represented as playing the lyre, tambourine and double pipe. Also in a patera now in the Varvakeion,<sup>19</sup> at Athens, the three musicians appear, though differently treated. We may accordingly suppose that in this procession there were only three musicians: the first playing on the tambourine, the second on the double pipe, the third on the lyre; the order of the players being different from that on the other two pateræ.<sup>20</sup> Processional scenes, common on Egyptian, Assyrian and Persian monuments, occur also on several Phoinikian pateræ. The one which approaches nearest to that upon our patera is found on the outermost zone of a second patera from Kition,<sup>21</sup> also in the Louvre. Here are seen mounted and unmounted warriors, and the king in his chariot, forming a grand procession.<sup>22</sup> The general spirit of such a procession we may suppose to have been given in our patera.

The mysterious lines to the left of the musicians, apparently part of the original design, suggest another restoration of this lower zone. In the silver patera from Golgoi, the three musicians are in the sacred boat. There are four of these boats at right angles to each other around the central medallion. A similar arrangement of boats occurs on the Eshmunjaad patera. The mounted horseman in our patera does not, as such, conflict with this view; for, between the four boats on the Golgoi patera, we find represented horses, a chariot-scene, cattle, and geese. But the horseman cannot, in this case, occupy such a position, as this would not leave room enough for the four boats. Besides, the boat-scene would be out of relation to the central medallion and the outer zone, in both of which we have significant pictures. Moreover, the lines of the boats would orient the patera in a manner at variance with the orientation established by the scene on the outer zone. If, how-

<sup>18</sup> CESNOLA, *Cyprus*, pl. XI.

<sup>19</sup> PERROT and CHIPIEZ, *op. cit.*, III, fig. 274.

<sup>20</sup> On two archaic Kypriote pateræ, the musicians appear in the order, double pipe, lyre, tambourine. One from Idalion is published, *Rev. Arch.*, 1872, pl. XXIV; CESNOLA, *Cyprus*, p. 77; CL. GANNEAU, *op. cit.*, pl. V. The other, from Kourion, now in the Metropolitan Museum, New York, is unpublished.

<sup>21</sup> Published *Mus. Nap. III*, pl. X; CL. GANNEAU, *op. cit.*, pl. II; PERROT and CHIPIEZ, *op. cit.*, III, fig. 272.

<sup>22</sup> Similar processional scenes occur on the pateræ from the tomb of Regulini-Galassi in Cere: GRIFFI, *Mon. di Cere antica*, pls. V, VIII, IX, X; PERROT and CHIPIEZ, III, figs. 268, 275. Also on a silver krater from Palestrina, *Mon. d. Inst.*, X, pl. 33.

ever, we suppose that a procession is represented, the beginning and end of it would fall under the fortification on the outer zone; that is, precisely where we should expect to have it begin and end. We may also observe that the general movement of this procession is from left to right, a fact which helps to cut it off and distinguish it from the scene on the outer zone, where the movement is in the reverse direction.

*The ornamental bands: torsade and palmette.*—The line of ornament which separates the lower from the upper zone, and which probably also encircled the central medallion, is the torsade or twisted cable, which occurs frequently on the Assyrian monuments, here placed between two circles of diminutive pearl ornament. Upon the archaic pateræ from Idalion and Kourion, and upon the pateræ from Nimrûd,<sup>23</sup> we find the torsade without the pearl ornament. In our patera, we have the more elegant form of the torsade; the loosely twisted cable showing little openings or eyes at regular intervals, enriched by the addition of the circles of pearls. The Kypriote artists of this period appear to have been specially fond of the pearl ornament, as we find it upon a number of pateræ, used not merely as an ornamental band but as a conventional substitute for lines. In one of the pateræ from Kition,<sup>24</sup> all the circular bands of ornament are made up of triple rows of pearl ornament. The other band of ornament which forms the outer circumference of the upper zone, we have termed the palmette ornament, from its resemblance to the Assyrian palmette. It is a conventional form of floral ornament derived from the Egyptian lotus. Upon Egyptian wall-paintings,<sup>25</sup> an Assyrian pavement<sup>26</sup> from Kouyundjik, and a bronze vessel<sup>27</sup> from Nimrûd, it appears as a series of lotus blossoms alternately expanded and closed. In this form it also appears upon Kypriote pateræ.<sup>28</sup> In our patera, the closed lotus bud has disappeared, and its place is supplied by a diminutive circle or pearl. The expanded lotus flower has also assumed a conventionalized form which shows but little trace of its origin. Greater richness and solidity of effect is secured by placing below the palmette a line of pearls. In the Palestrina patera this uppermost band of ornament is replaced by the more significant, though less decorative, cosmic serpent.

*The upper zone.*—Here we find, with slight variations in the details and mode of treatment, the same design which appears in the famous

<sup>23</sup> LAYARD, *op. cit.*, pl. 58-68.

<sup>24</sup> *Mus. Nap. III*, pl. XI.

<sup>25</sup> PRISE D'AVENNES, *op. cit.*, pl. "frises fleuronées." <sup>26</sup> LAYARD, *op. cit.*, pl. 56.

<sup>27</sup> LAYARD, *op. cit.*, pl. 57.

<sup>28</sup> CL. GANN, *op. cit.*, pls. II, IV.

Palestrina patera. It represents the exploits of a king or hero in Assyrian costume. The narrative begins and ends with the symbolic representation of a walled town, and, like the written language, reads from right to left. It is punctuated, or divided, into four nearly equal parts by the fortification above, the mountain below, and the two hills<sup>29</sup> at either side. In the first section (I, II), we see the king starting from the town in his chariot: he descends and shoots a stag. In the second section (III, IV, V), the stag is killed and flayed, and the king offers a sacrifice. In the third section (VI, VII), which begins the *antistrophe*, the king is attacked by a gorilla, is miraculously saved, and in turn attacks the animal. Finally (VIII, IX, X), the king captures and kills the gorilla and returns to the town.

We may now examine the separate scenes in detail and compare them with the corresponding scenes on the Palestrina patera.

I. *The king in his chariot starts out from the town.*—We may fill out this picture by adding the completer details of the king's Assyrian costume and the battle-axe over his left shoulder, the Egyptian driver pressing forward to urge his steeds onward, and the quiver attached to the side of the chariot. The parasol over the king and the bird flying toward the town, which appear in the Palestrina patera, may be omitted in our restoration; as there is no trace of them here, or in the remaining scenes. As slight deviations in the two drawings, we may notice, that, in the Palestrina bowl, the right fore-legs of the horses extend in front of the wheels of the chariot belonging to the next scene; in our patera they are suggested, not fully drawn, behind the wheels: also that, in our patera, traces of the horse's collar are still visible. The wheel of the chariot in this scene is too large and has eight spokes; in the remaining scenes it has only six.

II. *The king has left the chariot and is drawing his bow to kill a stag which stands in front upon a slight eminence. The driver brings the horses to a stand-still.*—The differences between the two drawings are more marked than before. The peculiarities of the Palestrina representation are, the stag in rapid motion and upon higher ground, no tree behind the king, the two birds, and the parasol. The trees in our

<sup>29</sup> The hill to the left is no longer visible, but may be restored by means of the Palestrina patera. The large hill below divides the entire narrative into two parts. The stag episode and the gorilla episode are opposed to each other like the strophe and antistrophe of a Greek chorus. The smaller hill subdivides the narrative still further.

patera are drawn in a geometrical manner, and the branches indicated by lines of pearl ornament: the tree in the Palestrina patera is drawn in a ruder but more natural manner. To complete our picture, we may draw the Egyptian driver in an erect posture, add the quiver to the chariot and collar to the horse, and to this and all subsequent representations of the horse add a long tail drawn very much like a long curved feather.<sup>30</sup> The king's garment appears to be the royal *kaunakes*,<sup>31</sup> and is drawn uniformly in subsequent scenes, without the variations observable in the drawing of the Palestrina patera. The stag is in an expectant, motionless attitude. We may complete his head and antlers, and add, perhaps, the short parallel rows of lines which indicate the hairy texture of his hide.<sup>32</sup> We may also complete the hill, giving it the same general form as the hill on the Palestrina patera, but with less elevation. We may draw it according to either one of the two methods employed on our patera. The presence of the stag upon a Kypriote patera presents no such difficulty as does its appearance upon the Palestrina patera, when the attempt is made, as by M. Clermont-Ganneau, to prove that the latter was made in Carthage. For, not only was the stag common in Kypros, but at Kourion itself, as Aelian informs us (*De Nat. Animal.*, v. 56), there were quantities of stags in the sacred grove of the shrine of Apollon (*op. cit.*, xi. 7).

III. *The king has shot the stag.*—We may complete our drawing by placing the bow in the king's right hand, and in his left the arrows extending over his left shoulder. An arrow is seen plunged in the stag's breast, from which the blood is dripping to the ground. The hill is slightly depressed where the king is standing, but rises again toward the end, where the wounded stag is vainly endeavoring to escape.

IV. *The driver has turned the chariot about and feeds the horses: the king is flaying the stag whose carcass is suspended on a tree.*—In this scene on the Palestrina bowl there are two birds flying nearly over the driver's head, and four trees, one of which is the date-palm. On our patera there are no birds, and only three trees, all of the same conventional type. The details of the picture may be completed by adding the tripod manger from which the horses are feeding, the chariot upturned so that the pole rests against the tree and exhibiting a quiver

<sup>30</sup> This method of representing the horse's tail seems to have been the only one employed on Phoinikian patera.

<sup>31</sup> HEUZEY, *Rev. Arch.*, 1887, p. 257-72.

<sup>32</sup> If these lines, as M. Ganneau supposes, were intended to represent spots, the stag becomes the dappled fallow deer sacred to Apollon: see PRELLER, *Gr. Myth.*, p. 183.

attached to this side also, and the king with his knife flaying the suspended stag. The scene occupies less space, and the figures are more crowded, than in the corresponding scene on the Palestrina patera.

v. *The king offers a sacrifice to Apollon.*—This scene terminates the first portion of the narrative. In order to place it in the first half of the zone, the artist was obliged to treat it in a more summary fashion than appears on its Palestrina counterpart. He accordingly omits the two altars, and substitutes a single fixed altar. There is no room for the king seated upon his throne to the right of the altar, so he is represented as standing behind it. There is, perhaps, a difference in the significance of the two pictures to account for the difference of form. The two altars and the combined disk and crescent<sup>33</sup> of the Palestrina patera appear to suggest a double sacrifice, addressed to two divinities, one solar, the other lunar; as well as two kinds of sacrifice, one of blood or wine, the other, and larger, the burnt offering of the stag.<sup>34</sup> In the Kourion patera, especially if we suppose that it was made in Kourion or for some one in Kourion, it was enough to represent the sacrifice as made to Apollon alone; for here was the great shrine to Apollon Hylates,<sup>35</sup> with its famous grove. The determinative of the god is given by the winged disk above. In Egyptian, Assyrian, Persian and Phoinikian monuments the winged disk had indicated a solar divinity: it may be that we should content ourselves with seeing in the symbol here no more than the general Phoinikian Sun-god. The mount which closes the first half of the narrative is somewhat larger and higher than the corresponding hill on the Palestrina patera. This may be accounted for by the sense of symmetry, which our artist exhibits in his desire to balance the fortification at the top of the patera. Hence he omits the five trees, the stag and the hare, which appear on the Palestrina mount. But we may believe that he did not omit the gorilla's head, which appears from the mouth of a cavern to the right of the hill. There is room enough for it, and its presence would account for the altar being drawn so close to the body of the king in the adjoining scene.

<sup>33</sup> For the combined disk and crescent on Phoinikian monuments, see HELBIG, *Ann. d. Inst.*, 1876, p. 217.

<sup>34</sup> The stag was offered in Phoinikian sacrifices (see CL. GANN, *op. cit.*, pp. 69-89) the gazelle in Chaldean sacrifices to Šamaš, Ištar and Sin, solar and lunar deities (MÉNANT, *Glypt. orient.*, I, p. 145).

<sup>35</sup> ENGEL, *Kypros*, II, p. 667: according to CESNOLA, *Cyprus*, p. 342, the temple of Apollon was outside of and to the north of Kourion.

VI. *The king is returning to the town, when he is attacked by a gorilla, but is saved by divine interposition.*—In our patera the scene is again given in shorter space. The gorilla is just emerging from his cave, instead of being fully out and away from it. To complete the picture, we have only to add the club in his right hand and the waving grass or dust in front of him, which marks the place from which the chariot and its contents are transported to the sky. We have called the monster, who endangers the life of the king, the gorilla, because that term suggests to us, what we have here represented, the troglodyte hairy-man of ancient and modern story. It is evident that it is not an ape that our artist intended to represent: for his Egyptian and Assyrian masters had instructed him how to draw more accurately the simian type. We are at a loss to connect this creature directly with any graphic ancestor. We have reached a missing link, and until we find it must seek an explanation from another quarter. Had we been called upon to predict what kind of a creature would have been employed to endanger the life of the king, we should have looked for a lion, or a lion-headed man, or a griffin, or one of the composite beings known to us in ancient art. But a troglodyte wild man of the woods is an unexpected appearance, and his presence must be accounted for.

We know, from literary sources, that the Phoinikian and Greek imagination had peopled the heart of Africa with monsters resembling our gorilla. Herodotos (iv. 191) tells us that in the eastern desert of Libya there were, according to the Libyans, "*kunocephaloi* and *akephaloi* with eyes in their breasts, and wild men and wild women, and quantities of other imaginary monsters." According to Aelian, beyond the fertile land of Egypt, in the desert toward Ethiopia, there dwelt the *Κυνοπρόσωποι ἄνθρωποι*, or dog-faced men.<sup>36</sup> The Troglodytes, of which Aelian speaks (*op. cit.*, vi. 10; ix. 44), were also men. The hairy skins which Hanno brought from western Africa to Carthage appear to have been those of the female gorilla.<sup>37</sup> The presence of such

<sup>36</sup> *De Nat. Animal.*, x. 25: "Οασιν τὴν Αἰγυπτίαν διελθόντι ἀπαντῶ ἐπὶ τὰς ἡμερῶν ὅλων ἐρημία βαθυτάτη· μετὰ δὲ ταύτην Κυνοπρόσωποι νέμονται ἄνθρωποι, κατὰ τὴν ὁδὸν τὴν εἰς Λιβυοσίαν ἔχουσιν. Ζῶσι. δὲ ἄρα οὗτοι θηρῶντες δορκάδας τε καὶ βουβαλίδας. Ἰδεῖν γε μὴν μέλανές εἰσι, κυνὸς δὲ ἔχουσι τὴν κεφαλὴν καὶ τοὺς ὀδόντας· ἐπεὶ δὲ εἰκόνασι τῶνδε τῶν ζώων, καὶ μάλα γε εἰκότως αὐτῶν ἐνταυθοὶ τὴν μνήμην ἐποιήσαμην. Φωνῆς γὰρ ἁμοιροῦσι, τρίζουσι δὲ ὀξύ, κάτεισι δὲ ὑπὸ τὴν ὑπὲρ αὐτοῖς γένειον, ὥς εἰκάσι τοῖς τῶν δρακόντων αὐτό, αἱ δὲ χεῖρες αὐτῶν ὄνυχιν ἰσχυροῖς καὶ ὀξυτάτοις εἰσι τεθηγμέναι, τὸ δὲ πᾶν σῶμα δασεὺς πεφύκασι, κατὰ τοὺς κύνες καὶ τοῦτο. Πικιστοὶ δὲ εἰσι, καὶ ἴσασι τὰ ἐν τοῖς τόποις δύσβατα· ἐντεῦθεν τοὶ καὶ δυσάλωτοι δοκοῦσιν.

<sup>37</sup> PLINY, *Hist. Nat.*, vi. 36.

a monster on a Kypriote patera of the sixth century need not surprise us, as, in the preceding century, the Kypriotes were in commercial relations<sup>38</sup> with Egypt, and could not have failed to have been impressed by the trained monkeys,<sup>39</sup> and to have heard of the wilder denizens of the desert.

It is to be expected that the divinity would protect his pious worshipper from danger. Here the miraculous preservation is accomplished, not by Baal, but by his counterpart Baaltis or Astarte. It was natural that the Kypriote artist should not overlook his chief divinity. He may also, by representing the lunar goddess, have intended to suggest that it was already evening when the king was returning to his castle. Or it may be that the king has passed from the district of Apollon's shrine, and is already under the dominion of Astarte.<sup>40</sup> She is represented here by a winged Hathoric mask, bearing aloft, in her long arms, chariot and horses, king and driver. The symbol, like that for Apollon, is an Egyptian symbol, but it is not likely that are represented here the Egyptian gods which Amasis endeavored, with small success, to introduce into Kypros. It would be more natural to see, in her, Artemis, the counterpart of Apollon. The curved wings, with which she appears in Persian and early Greek art, her association with Apollon and with the stag, would point in this direction. But it is Hera rather than Artemis that the Argive settlers of Kourion would have carried with them to Kypros. So we content ourselves with seeing only the more general Phoinikian goddess, in whom were combined many of the attributes which the Greeks, in a later day, distributed amongst Hera and Artemis, Aphrodite, Athena and Demeter. It is probable, also, that at this time the Phoinikian population<sup>41</sup> of Kourion outnumbered the Greek. The miniature-skill of the artist in representing the whole chariot-scene within a circle of  $\frac{1}{4}$  in. diameter should not be overlooked.

VII. *Saved by the divinity, the king attacks the gorilla.*—We may complete the chariot as before, omitting the parasol and two birds represented on the Palestrina patera. In our patera, the gorilla has not fallen to the earth, but is ascending a hill. The frightened horses, which have overtaken him, are represented in more spirited fashion. The interposition of a hill, dividing this scene from the next, introduces a

<sup>38</sup> ATHENAIOS, xv. 18; PETRIE, *Naukratis*, I, p. 4.    <sup>39</sup> AELIAN, *op. cit.*, VI. 10.

<sup>40</sup> This suggests that the unknown temple discovered at Kourion was a temple of Astarte.

<sup>41</sup> PERROT and CHIZEZ, *op. cit.*, III, p. 238.

symmetrical rhythm into the composition of the frieze, marking as it does the middle point of its second half. It is more carelessly drawn than the larger hill: its wooded character is indicated by two conventional trees, which fill the space occupied by the Horus-hawk on the Palestrina patera. Though differently drawn from the hill on the opposite side of the frieze, it conveys the impression that, in returning to the town, the king passes through the same hilly woodland country as that upon which he met the stag. The mountainous character of the country about Kourion, and especially in the direction of the shrine of Apollon, will account for the representations of hills on our patera.

VIII. *The king captures the gorilla.*—The treatment of this scene is more conventional than in the Palestrina patera. The pose of the king and that of the gorilla are both derived from the ordinary group representing conquest, such as we find in our central medallion. Even the tying of the captive's arms behind his back is a common Egyptian motive. To complete the design, we have merely to finish the lines of the battle-axe, and draw the king's left arm which grasps the gorilla's hair. In this scene, the king's garment is more clearly preserved than in any other figure of the king on this or the Palestrina patera. It is evidently the woolly *kaunakes*, figured on Chaldaean and Assyrian monuments, and highly valued by the Greeks.<sup>42</sup> The parallel rows of little lines are reminders of the mode of its manufacture, but come to denote also its hairy or woolly texture, for the hairy skins of the stag and of the gorilla are indicated in the same manner.

IX. *The king returns to the town.*—The Palestrina picture adds to ours the bird and the king's parasol, both of which were here intentionally omitted. The only difference between the two is that, in the Palestrina picture, the horses have reached their destination, and their fore-limbs already lose themselves behind the walls of the town. It is substantially the same design as that of the first scene.

X. *The town is reached.*—There is room enough for another scene, before our hero has reached his destination. What that scene was we cannot tell, for it has been lost through the fracture in the patera. Nor can the Palestrina patera enlighten us, for, in that, the ninth scene is the last. Possibly, the king descends from the chariot to enter the town on foot. At all events, the end is not like the beginning, and we must wait until another patera of similar design is found before we know the end of the story. The wall-structure, with its three

<sup>42</sup> ARISTOPH., *Wasps*, 1056-1131.

crenellated towers, is not a castle, but the symbol for a town. This appears to be proved by the triple-towered structure represented on a patera from Amathous,<sup>43</sup> also in the Metropolitan Museum of New York. In this case, we can look through the walls into the city, where we see houses of domical construction, like the "bee-hive" tombs of Asia Minor, Greece and Etruria. The structure on our patera seems, then, to represent the walls of Kourion, within which the king returns.

*Interpretation.*—If we ask, who is the royal, priestly hero whose exploits are here related, an answer comes from Kypriote mythology. Can it be any other than Kinyras,<sup>44</sup> the mythical king of Kypros, the cherished priest of Aphrodite and heartily beloved by the golden-haired Apollon?<sup>45</sup> He was the founder of Kourion,<sup>46</sup> as well as of Amathous, Paphos, and other cities of Kypros. He was the inventor of the hammer and chisel, and of mining,<sup>47</sup> and hence an appropriate subject for the decoration of a patera. He was called the king of Assyria,<sup>48</sup> and here wears the Assyrian royal costume. The stag episode tells us of his priestly character, and the gorilla episode reveals to us both the tender care of the goddess and the lack of personal courage of the Kypriote king who gave to Agamemnon the beautifully wrought breastplate of kyanos and gold and tin (*Il.*, xi. 20 ff.), but who failed to send the promised support to Troy, and was afterwards driven from his possession in Amathous. Lucian (*De dea Syr.*, 9) tells us of an ancient shrine to Aphrodite established by Kinyras in Mount Libanos, a day's journey from Byblos; so that Syro-Phoinikian tradition furnished materials for a similar and earlier treatment of the Kinyras myth.

The middle zone of the patera is almost wholly lost, but the figures which are left may be explained within the limits of the Kinyras myth. Kinyras was the personification of Phoinikian music, which was based upon the pipe. He came into musical conflict with Apollon and was overcome by him. His name is suggestive of the plaintive songs which were sung in the various Adonis festivals over the ancient world: Greece, Asia Minor, Kypros, Syria, Palestine, and Egypt had similar dirges in honor of a youthful god or hero whose

<sup>43</sup> CECCALDI, *Mon. antiq. de Chypre*, pl. viii; and *Rev. Arch.*, 1876, pl. i; CL. GANN, *op. cit.*, pl. vi; CESNOLA, *Cyprus*, pl. xix; PERROT and CHAPIER, iii, fig. 271.

<sup>44</sup> ENGEL, *Kypros*, ii, pp. 94-136; MOVERS, i, pp. 238-53.

<sup>45</sup> PIND., *Pyth.*, 2. 15.

<sup>46</sup> ENGEL, i, p. 204.

<sup>47</sup> ENGEL, ii, p. 105.

<sup>48</sup> HYGIN., *Fab.* 242; BION, i. 24.

life was suddenly cut short.<sup>49</sup> May it not be that the procession in the second zone of our patera expresses in plaintive notes the sorrow over Phoinikian downfall in Kypros? The central medallion we have already explained as signifying Egyptian triumph, but we have not explained the man who follows the triumphant king. If we refer to the Egyptian monuments which contain similar representations, there are few that give us any help. In one of these, however, representing the triumphant Taharqa,<sup>50</sup> we see to the left of the scene the prototype of this figure. It is the solar divinity Amen-ra,<sup>51</sup> crowned with two ostrich feathers, bearing in one hand the long sceptre and in the other the symbol of life, and drawing after him the captive nations symbolized by human-headed cartouches. A similar divinity of inferior order was the Egyptian Shu,<sup>52</sup> the "sun of the sun," crowned with one or four ostrich feathers. Translated into Phoinikian mythology, he is Melkarth or Herakles,<sup>53</sup> who was closely associated with the cult of Apollon and Aphrodite<sup>54</sup> in Kypros, upon whose altar human sacrifices were offered, and who was responsible for the death of Kinyras.<sup>55</sup> Instead of the sceptre he carries a spear, instead of the symbol of life he carries the cedar-tree which was to be placed before the temple of Aphrodite and on which on the sad opening days of the Adonis festival a human figure was hung.<sup>56</sup> With Egyptian conquest comes Phoinikian death. This seems to be the key which unlocks to us the meaning of the patera.

*Conclusion.*—The striking resemblance of the figured narrative on the Kourion and Paestrina patere at first suggests a single artist: yet, the stronger decorative sense shown in the general composition, the finer ornamental bands and more carefully executed details of the Kourion patera make it probable that it was not made by the artist of the Paestrina patera. The differences, however, are not so great, but that either may have been a modified copy of the other or derived from the same design. M. Ganneau is inclined to ascribe to the Paestrina patera a Carthaginian origin: but that the Kourion patera was made in Kypros is almost a certainty. Not only does it exhibit the mixed characteristics of Kypriote art, but, if our interpretation be correct, it has a

<sup>49</sup> ENGEL, II, p. 115; MOVERS, I, pp. 243-53.

<sup>50</sup> LENORMANT, *Hist. anc. de l'Orient*, II, p. 367.

<sup>51</sup> WILKINSON, III, p. 9.

<sup>52</sup> *Idem*, III, p. 172.

<sup>53</sup> In the patera from Salerno he wears the lion-skin.

<sup>54</sup> MOVERS, I, p. 382.

<sup>55</sup> ENGEL, II, p. 617.

<sup>56</sup> *Idem*, pp. 558-59.

definite historical and local significance. It was, moreover, found with objects of gold, silver, copper and iron;<sup>57</sup> all of which metals were found in Kypros.<sup>58</sup> The great abundance of metallic objects which have been discovered on the island in recent years makes it probable that the Greeks were not wrong in ascribing to the fathers of metallurgy, the Telchines, a home in Kypros.

We have taken the central medallion as an indication that the patera represents the brief period of Egyptian domination in Kypros, and accordingly may be referred to the middle of the sixth century B. C. The Egyptians,<sup>59</sup> as early as Thothmes III, engraved silver pateræ. It is Egyptian and not Assyrian influence that we feel in the Nimrûd pateræ; and in all which have been found in Kypros we recognize a style either purely Egyptian,<sup>60</sup> or Egyptian mixed with Assyrian,<sup>61</sup> or Greek<sup>62</sup> designs. In none do we recognize a purely Assyrian style. We therefore look to Egypt as the ultimate, perhaps also the nearer, inspiration of the beautiful silver pateræ which were made by Phœnikian or Greek artists and carried by merchants from one end of the Mediterranean to the other.

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<sup>57</sup> CESNOLA, *Cyprus*, ch. XI.

<sup>58</sup> ENGEL, I, ch. IV.

<sup>59</sup> MASPÉRO, *L'Arch. Égypt.*, pp. 299-301.

<sup>60</sup> CESNOLA, *Cyprus*, pl. XI.

<sup>61</sup> Our Kourion patera.

<sup>62</sup> Amathous patera, CL. GANN., *op. cit.*, pl. VI.

## NOTES ON ORIENTAL ANTIQUITIES.

### IV. AN EYE OF NABU.

Among the smaller objects from Mesopotamia in my possession are two which deserve detailed description.

One of these is a sardonyx disk, twenty-three millimetres in diameter. The layers of stone have been carefully polished so as to give the appearance, on one side, of the human eye: an outer white layer represents the cornea; the next upper layer of light brown forms the iris; and yet another layer of dark brown, the pupil. The stone is cut with some skill, so as to secure the right position of the iris and pupil, as the layers are not perfectly even. A hole has been pierced through the diameter of the "eye," to fasten it with a wire, or string, into the socket. On the iris-layer is a very delicate inscription, as follows: *Ana Nabû bēlisu Nabu-kuduri-usur sar Babilî ana balati iskun.* "To Nabu, his lord; Nebuchadnezzar, King of Babylon, made for his life." This object, then, formed the eye of an idol of Nabu, set up by Nebuchadnezzar in honor of the god whose name he bore.

The class to which this object belongs is not unknown, and has been the subject of successful study by M. Ménant. A very curious cameo, in glass, has long been known, in which a Greek head appears surrounded by a dedicatory inscription of Nebuchadnezzar to the god Merodach. It was a great puzzle to scholars, until M. Ménant (*Pierres Gravées*, vol. II, pp. 142-48) showed that it is a copy of an onyx in the collection of the Grand Duke of Tuscany (Museum of Florence), which originally served as the eye of an image of Merodach, but which at a later time, perhaps at the conquest of Alexander, a Greek artist utilized by cutting, in the dark iris and pupil, a head with a Greek head-dress. It is plain that this gem can no longer figure as a portrait of Nebuchadnezzar. Several other examples of these sardonyx "eyes" exist in collections. In George Smith's *Assyrian Discoveries* (p. 385) is given the translation of a dedication by Nebuchadnezzar to Nabu on a similar "eye," of which he got only a cast in his first expedition. In Ménant's Catalogue of the Museum of the Hague another sardonyx

eye of the same kind is described, with an inscription indicating that it belonged to an image of Merodach. Two others are cited by Ménant, one belonging to the Gobineau Collection, now in the possession of M. Hirsch, and the other to the Louvre (*ibid.* p. 147).

#### V. A BABYLONIAN BRONZE PENDANT.

Yet another interesting object is a bronze pendant, forty-two millimetres in length, pierced at the upper end for suspension. It is engraved on the two sides, as given in *figures* 17, 18. A worshipper, probably holding a staff, appears on one side in adoration before a goddess seated in a chair with six stars attached to the back of it, and



FIG. 17.—Obverse;



FIG. 18.—Reverse.

resting on a composite winged animal. On the other side the same animal, or griffin, appears twice, rampant, and over them are the seven dots, or stars, perhaps of the Great Bear.

The goddess here represented frequently appears in Assyrian art, both on the bas-reliefs and on the cylinders, and once on a scarab apparently of Phœnician engraving and with a Phœnician inscription. She appears with such comparatively late elements as the sacred tree and the winged disk with streamers, which have an Assyrian rather than a Babylonian origin, though continued down to a period long subsequent to the fall of Nineveh. They are all rudely engraved, with the drill or wheel and not with the corundum point, but on hard chalcedony or carnelian. They are generally rather small, but I have one large one in my collection, of a yellowish chalcedony, obtained in Bagh-

dad and presumably from Babylonia. It is not easy to identify this goddess. She seems to be the same as appears borne on men's shoulders on a Nimrûd sculpture in Layard's *Monuments of Nineveh* (First Series, pl. 65). Of the three goddesses there represented, this one seems to be the second, drawn in profile. This is the only case I recall in which the goddess on this peculiarly ornamented chair appears with any animal. For this reason, and because this animal is not the lion, but the griffin in an unusual position, she can hardly be identified with the *Venus supra leonem*, who often appears on the cylinders. The latter goddess seems to be the Ishtar of War, and is drawn in front view, and variously armed. The goddesses in the Babylonian and Assyrian pantheon are not so well differentiated as the gods, and it is extremely difficult to distinguish them from each other.

The ring held in the hand of the goddess on this pendant merits notice. It is so often borne by goddesses, either in the form of a simple continuous ring, or of a ring, or wreath, of dots, that it might appear to be a feminine emblem. But in a single case known to me (Layard, *Monuments of Nineveh*, First Series, pl. 26) it is borne by the supreme god Aššur represented in the developed form of the winged disk. On the rock of Bavian (Layard, Second Series, pl. 51) each of the two bearded deities holds in one hand two objects, one the ring, and the other a sort of sceptre. As the two sceptres vary much in form, and the ring, which in one case is held near the middle of it, is held in the other case near its end, it is evident that the ring is not attached to the sceptre, as Ménañt supposes it to be in the case of the god "Serah," of the famous stone-tablet of Abu-habba, who carries in his right hand a short rod, with a large circle evidently drawn separate from it, held at the middle of the rod. Ménañt identifies this with a long rod, with a small circle attached to its middle, which often appears on the cylinders, and which Lenormant has regarded as a balance, but which Ménañt, trusting to the inscription of the god "Serah," calls a sceptre of Justice, made in the form of a measuring rod. The ring and the rod held by "Serah," I think, are clearly separate, and we thus have three instances where a male deity holds the ring with the sceptre: this on the stone-tablet of Abu-habba, and two on the rock of Bavian, beside the unique case in which Aššur holds the ring alone. Lenormant has much to say about a peculiar weapon in the form of a ring, or disk (*Les Origines de l'Histoire*, t. I, pp. 152-59) held by the gods; but, even if his interpretation be right (and the text depended on

by Lenormant for this revolving disk is differently translated by Sayce, *Hibbert Lectures*, pp. 180-82), I do not know of its being represented in Mesopotamian art. This ring, held generally by a goddess and not notched, cannot be it.

#### VI. THE STONE TABLET OF ABU-HABBA.

I am greatly in doubt whether the inscriptions of the god "Serah" on this Abu-habba tablet have been properly interpreted. There are three small inscriptions which describe the objects represented. The objects being figured directly before us, it would seem that it would be easy to interpret the inscriptions: but such is not the case. The right of the figured portion is taken up with a deity in a four-horned tiara, seated under a canopy, which is supported in front by a palm-trunk column which has Ionic volutes at the top and bottom: immediately under the canopy, and so on a level with the top of the tiara of the god, are the common emblems of Sin, Shamash and Ishtar: the god holds in his extended hand a ring and a rod. The left portion is occupied by a table, on which rests a large disk of the sun over two volutes: two cords behind the disk, reaching to the table, are held by two figures whose busts are seen in the sky: a small bearded figure leads a second to the altar, and behind them is a third beardless figure with a four-horned tiara, with both hands lifted. Under the whole length of the figured portion appears a sea or stream of water, with four stars in the water. These stars represent the planet Venus, and not the sun, in its course under the earth.

In the principal open space, to the left, is an epigraph perfectly easy to read: *Salam ili Shamash belu rabu | ashib E-Parra | sha kirib Sippara-ki*: "Image of the Sun-god (Shamash) great lord, inhabiting E-Parra, which is within Sippara." Dr. Haupt informs me that *salam* cannot well refer to any other than the image of a human or living object; otherwise, I should be inclined to suppose that the "image" of this inscription is the large disk of the sun on the altar. This is not the only known case of such a disk of the sun worshipped in the East. Professor John A. Paine has described several large disks in the land of Moab (too large to be mill-wheels) which he regards as objects of sun-worship. If this epigraph cannot refer to the large disk held by cords, it must describe the seated god, or, rather, the whole scene of which he is the central figure.

The narrow space over the canopy is occupied by two closely inscribed

lines, as follows: *Ilu Sin ilu Shamash ilu Ishtar ina pāt apsi | ina birit ili Siru timeru mesrit (?)*. It is clear that the deities Sin, Shamash, and Ishtar are represented, immediately under this inscription, by their usual circular symbols. The meaning of the rest of this line and of the next is not so plain. *Ina pāt apsi* might mean "in front of," or "in the mouth of" *apsu*, "the ocean," only they are not specially figured as related to the ocean, which must be the water at the bottom of the scene. At most, only Ishtar is drawn in connection with the ocean, in which she appears four times. I raise the question whether it may be translated, "in front is the ocean."

The next words, *ina birit ili Siru*, would be translated, "Within (or between, or near by) the god Siru" (or "is the god Siru"). Siru, or Serah, is the Serpent-god, and Ménant and others understand that it is Serah who sits in the pavilion. But in this temple the seated god must be the Sun, Shamash: scarcely any other god could have this place of honor. It is difficult to see how this seated god can be Serah, unless Serah were considered to be a form of Shamash, which is unlikely. I raise the question, whether the back of the pavilion, rising from the ocean behind the Sun-god and bending over him till it meets the top of the palm-tree column, is not the Serpent, Siru or Serah. As seen in the photo-lithographic figures (*Trans. Soc. Bib. Arch.*, VIII, p. 164; or Ménant, *Pierres Gravées*, I, p. 243)—but not in the lithograph of vol. v of the British Museum Inscriptions—it clearly has the head of a serpent. The rest of this epigraph, *timeru mesrit (?)*, is difficult to understand. I raise the question, whether *timeru* may not refer to the palm-tree (Heb., *tamar*, "palm-tree") column in front of the seated Sun-god. The word *timeru*, in the inscriptions, means "a column" in the expression "a column of smoke." We would then have represented the great encompassing ocean figured below, out of which arises the mighty Serpent which encompasses earth and sea and sky; the same which is represented as encompassing all things on the bowl of Pales-trina. Or, possibly, the Serpent is the storm-cloud which rises out of the ocean, and covers the throne of the Sun, reaching to the pillars which support the heavens; as we have it described in *Job*, xxvi: 9, 11: "He closeth in the face of his throne, and spreadeth his cloud upon it. . . . The pillars of heaven tremble and are astonished at his rebuke." The pillars of heaven tremble in a storm, as the pillars of the earth tremble in an earthquake, cf. *I Sam.*, ii: 8; *Job*, ix: 6; *Ps.*, lxxv: 3. For the pavilion of clouds, cf. *Ps.*, xviii: 11: "He made darkness his hiding-

place, his pavilion round about him; darkness of waters, thick clouds of the sky."

The epigraph within the pavilion and over the hand of the seated god is in two short lines, and must describe something near to it: it reads, as I make it, *Agu ili Shamash | mush-shi ili Shamash*. It will be seen that I read the two vertical wedges, not as the numeral "two" (Pinches), but as *ditto*, repeating the *ilu Shamash* of the line above, which there was not room to write again in full. The first line is easily translated, "Circle (ring, disk) of the god Shamash." Of course, then, it is Shamash who is seated on the throne, and not another god, Siru, or Serah. This "circle" I understand to be the ring in the god's hand, while the *mush-shi* of the second line (a word I am not able otherwise to identify) may probably indicate the wand or rod which he holds in his hand with the ring.

If the above interpretations have any merit, it comes less from ability to translate the inscriptions than from a careful study of their relation to the objects figured. My controlling idea has been, that the epigraphs must be in close relation to the design: that whatever is mentioned in the inscription must be found in the scene represented, and as near to it as possible. This reason alone should, I think, almost compel us to see, as the *agu* or "circle," the ring in the hand of the god, and not the disk on the altar outside of the pavilion. For the same reason, although the seated god is the chief figure of the whole design, I somewhat hesitate to make *salam*, in the left-hand inscription, refer to the god instead of to the nearer disk on the altar.

To this long digression, suggested by the ring held in the hand of the goddess on the bronze pendant, let me add that, of the three figures approaching the god, the last is Aa, wife of Shamash: she bears the divine emblem, four horns to her tiara. The consorts of the gods, when not possessing, like Ishtar, any special attribute, are represented on the seals with a divine tiara, a long goat-hair robe, often flounced, and with both hands lifted in an attitude of respect. Human worshippers lift but one hand: where several figures approach a god, his wife appears in the rear of all.

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## ANTIQUITIES OF SOUTHERN PHRYGIA AND THE BORDER LANDS.

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### I.

It is impossible to discuss the southern cities and frontier of Phrygia without discussing the cities on the other side of the frontier. If the site of each city were proved by epigraphic evidence of the name, found on the spot, the case would be different: but a number of names can be placed only by balancing evidence, whose value depends on the ancient condition of a wide extent of country. It happens that the central cities of western Pamphylia (I use the word in the late-Roman and Byzantine sense) are almost all fixed by independent epigraphic evidence, but the Pamphylian cities on the Phrygian frontier can be placed only by an investigation extending over the entire province of Pamphylia Secunda. Hence, the rather complicated plan of the present paper is forced on me. I discuss the border, city by city, and, after fixing the position of each city, mention any facts about its history in ancient time which seem to be as yet unknown.

Prof. Hirschfeld's careful *Reisebericht* (Berlin *Monatsber.*, 1879) has been most useful: I am the more anxious to lay stress on this, as the want of positive identifications in this district would lead those who look merely at definite positive results to undervalue his work. Clear statement of geographical facts and of ancient authorities make his work continually suggestive to the student,—far more so than if he had made a series of guesses, on insufficient evidence, at the ancient names of the sites which he visited.<sup>1</sup> Since Leake, guesses are no longer allowable: no other person's guesses can compete with his in authority, and modern travellers must rest on definite balancing of evidence. Each new guess at a name makes a new difficulty in the progress of our knowledge.

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### A. PHRYGIA.

1. LAODIKEIA.—I may contribute a few points toward the history of this important city, a detailed study of which is very much required.

<sup>1</sup>I refer to his work as Hirschf., p. —: and to Mr. A. H. SMITH's article in the *Journal of Hellen. Stud.*, 1887, as A. H. S., p. —. Where a coin is mentioned without any reference, it is to be found in Mr. HEAD's *Historia Numorum*.

1. GARGILIUS ANTIQUUS, Proconsul of Asia. In April 1884, I copied the following inscription on a fragment of the cornice, buried upside down amid the ruins of a large building on the north side of the stadium.

IANΩΑΔΡΙΑΝΩΚΑΙΞΑΡΙΞΕΒΑΣΤΩΚΑΙΞΑΒΕΙΝΗΞΕΒ

ΠΙΑΝΘΥΠΑΤΟΥΓΑΡΓΙΛΙΟΥΑΝΤΕΚΟΥΚΑΘΙΕΡΩΞΑΝΤΟ

... Τρα]ιανῷ Ἀδριανῷ Καίσαρι Σεβαστῷ καὶ Σαβείνῃ Σεβ[αστῇ  
οἱ.....ἐ]πὶ ἀνθυπάτου Γαργιλίου Ἀντε[ί]κου καθιέρωσαν τὸ [γυμνάσιον?]

Gargilius Antiquus may have been proconsul of Asia in the year that Hadrian visited Laodikeia, Nov.-Dec. 129 A. D., or soon after: his consulship is unknown, but may have been about 115-16. Hadrian perhaps ordered the Gymnasium (?) to be built, or it may have been dedicated during his visit.

2. ΧΩΡΟΙ. The territory of Laodikeia was divided into ΧΩΡΟΙ, of which the following are known.

(1) *Eleinokaprios*: It is known from the following inscription, on a sepulchral stele at *Budjali Cahve*, on the main road from the interior to the coast, about two miles west of Kolossai: copied by Arundel, by Renan 1865, by Ramsay 1881, and by Smith 1884: published *C. I. G.*, 3954, and *Lebas-Wadd.*, 1693 a. As there are several inaccuracies in the published texts, I give it in full: τοῦτο τὸ θέμα καὶ (ὁ) ἐπ' αὐτῷ βωμός ἐστιν Τατίας καὶ τοῦ ἀνδρὸς αὐτῆς Μοσχᾶ· ἐν ᾧ κεκήδενται ἡμῶν ἡ θυγάτηρ Τατάριν· οὐδενὶ δ' ἐξέσται ἄλλῳ κηδευθῆναι εἰ μὴ τῇ μητρὶ αὐτῆς καὶ τῷ πατρὶ· εἰ δὲ μετὰ τὴν ἡμετέραν τελευτὴν ἀπειθήσει τις τῶν προγεγραμμένων, δώσ(ε)ι τῷ Χώρῳ τῷ Ἐλεινοκαπριτῶν (δηνάρια) φ'.

The name of this district is probably derived from the fact that two rivers, Kapros and Eleinos,<sup>2</sup> flowed through it. In that case it must have been the northwestern *choros* of Laodikeia, including the district about *Urumlu*, *Serai Keui*, and *Gereli*, and the Eleinos is probably the stream that flows past *Urumlu* and joins the *Lykos*. The stone has therefore been carried a long way from its original to its present position, a very common occurrence.

(2) *Kilarazos*: It is mentioned in an inscription at the village *Hadji Ayubli*<sup>3</sup> (Smith-Ramsay, 1884).

<sup>2</sup> (See, below, 3. RIVERS.)

<sup>3</sup> Pronounced Hadji Ipli. The text of l. 1 is certain: the division of the names doubtful.

ΖΩΞΑΔΙΜΟΛΟΞΩΧΩΡΟΣ	Ζωσάδι? Μολοσῶ? ὁ Χῶρος
ΟΚΙΛΑΡΑΖΕΩΝΜΝΙΑΞΧΑΡΙΝ	ὁ Κιλαραζέων μν(ε)ίας χάριν.
ΕΛΠΙΣΠΑΡΟΔΙΤΑΙΞΧΕΡΙΝ	ἐλπὶς παροδίταις χ(αί)ρ(ε)ιν.

Kilarazos is placed on the map on the hypothesis that this inscription is near its original position. This place suits the authority quoted in the next paragraph.

To these we may probably add the following places, mentioned by Niketas Khoniates, a native of this district.

(3) *Panasios* is mentioned by Niketas Khoniates (p. 254) along with *Lakerios*, as *choroi*. The description of Manuel's operations suggests the situation about Denizli given on the map. *Lakerios* is perhaps identical with Kilarazos.<sup>4</sup>

(4) *Karia*: The references (Niket. Khon., pp. 655 and 523) show that it lay on the main road not far from Kolossai. It is called a *komopolis*, which in this place probably means merely a village.<sup>5</sup>

(5) *Tantalos* is mentioned along with *Karia*, as a *komopolis* on the march from Ikonion past Kolossai, towards Antioch on the Maeander.

*Harmala* (Niket. Khon., p. 549) may be in this district, but is more probably lower down the Maeander. *Hyelion* and *Leimmocheir* (Niket. Khon., p. 252) are two villages on the Maeander, where the bridge on the great eastern highway spanned the river. In Roman time the bridge was near Antioch: in Byzantine time the bridge was probably in the same place, though it may possibly have been higher up. In neither case could these villages have been within the bounds of *Laodikeia*. *Louma* and *Pentacheir* are placed by Haase (Ersch-Gruber, *Encycl. s. v. Phrygien*, p. 274) in the *Lykos* valley: the only reference to them (Niket. Khon., p. 251) shows that they were further west, perhaps even beyond *Tralleis*; in that neighborhood, Mount *Latmos* is called *Besh Parmak* (i. e., "Five Fingers").

3. RIVERS. Two are named on a coin, which is described by Mionnet (*Supplem.*, VII, p. 587):

"Obv. IOYΛΙΑ·ΔΟΜΝΑ·CΕΒ. Buste de Julia Domna.

Rev. ΛΑΟΔΙΚΕΩΝ·ΝΕΩΚΟΡΩΝ·ΤΟ·Π·Η· Femme debout tenant une patère de la main droite, et de la gauche le simulacre de Jupiter *Laodiceus*, debout à gauche entre un loup

<sup>4</sup> Byzantine names often occur greatly changed from the old forms: e. g., Kapatiana for Pakatiana, Morea for Roma (*Ῥωμῆα*).

<sup>5</sup> NIKETAS is singularly loose in his use of words: see below, under SEIBLIA.

et une chèvre : au-dessus du premier on lit dans le champ ΑΥΚΟC; au-dessus de l'autre ΚΑΠΡΟC."

This coin refers to the position, not of the town, but of the state of Laodikeia. The town is placed between the Asopos and the Kadmos, but the boundaries of the territory, *i. e.*, the state Laodikeia, are the Lykos and the Kapros: the latter separates it from Attoudda, the former from Hierapolis. The entire population of the territory, whether or not they resided within the walls of the town, were equally styled *Λαοδικεῖς*; and the coinage is struck in the name of the corporate body, the *Λαοδικεῖς*. The Kapros was a tributary of the Maeander (Strab., p. 578): it therefore must be the river of *Serai Keui*.

The Eleinos is the river next to the Kapros on the east (see (1)). Its name is doubtless the same as the Selinos of Ephesos and of Elis (Xenoph., *Anab.*, v. 3, 8).

The Asopos washed the walls of Laodikeia. The Kadmos was recognized both by Arundel and by Hamilton: the remarks A. H. S., pp. 224-5 seem to me correct. A glance at the map annexed will show that Pliny's description of the city is rather confused: *imposita est Lyco flumini, latera adluentibus Asopo et Capro* (*N. H.*, v. 105).

The natural boundaries of Laodikeia on the south and the southeast are determined by the lofty mountains of Kadmos (*Chonas Dagh*) and Salbakos (*Baba Dagh*) (Hirschfeld, p. 325). The little valley of the river Kadmos, which flows between the two ranges, probably belonged to the territory of the city.

4. GATES. The gate on the eastern side of Laodikeia was called the "Syrian Gate" (*αἱ Σύριαι Πύλαι*: Philostr., *Vit. Soph.*, i. 25). City gates were commonly named after some important town on the road which issued through the gate: so at Smyrna we have the "Ephesian Gate;" at Ephesos the "Magnesian Gate." The commerce of the East passed through the gates of Laodikeia: for example, the red earth of Kappadokia, which had in early times reached the Greeks by way of Sinope, was afterwards brought along the great eastern highway through Laodikeia to Ephesos (Strab., p. 540). The North and West gates were perhaps called "Hierapolitan" and "Ephesian."

5. TRIMITARIA was a title applied to Laodikeia: it is derived from *τρίμιτος*, a kind of cloth evidently manufactured in quantity there. The district is one which has preserved manufacturing power through the Turkish occupation. The title has been misunderstood by Wesseling.

II. HIERAPOLIS.—The inscription Lebas-Wadd., 1687, is of the highest interest as referring to *une véritable société mutuelle établie entre les ouvriers teinturiers en pourpre*: this suggests to M. Waddington the influence of Christianity. Unfortunately, a false reading<sup>6</sup> is the only authority for this interest: knowing M. Waddington's text, I yet read the stone clearly and unhesitatingly τῷ συνεδρίῳ τῆς προεδρίας τῶν πορφυραβαφῶν, "the council of presidents (πρόεδροι) of the purple dyers."

The text C. and B., p. 375,<sup>7</sup> ought to be read Μονο[γέ]ν[η]ς εὐχαριστῶ τῇ θεῷ. The formula occurs also in the Katakekaumene (Ἀπολῳνιος Δράλας δυνατῇ θεῷ εὐχαριστῶ Λητῷ<sup>8</sup>), at Ephesos (εὐχαριστῶ σοι Κυρία Ἄρτεμι, Wood's *Ephesus*, App., Augusteum 2-4, 8), and at Dionysopolis (εὐχαριστῶ Μητρὶ Λητῷ, C. and B., p. 385). The formula is peculiarly connected with the worship of Meter Leto. This goddess is traced by inscriptions: (1) at Perga of Pamphylia, where she is identical with the Ἀνασσα Περγαία, usually known by the Greek title Artemis. This follows from the inscription of Attaleia *ἱερέα διὰ βίου θεᾶς Λητοῦς τῆς Περγαίων πόλεως*.<sup>9</sup> (2) In Lykia generally, where she is one of the θεοὶ πατρῶοι, and the guardian of the tomb: cp. Bennd.-Niemi., No. 96, p. 118 ff.; Treuber, *Gesch. d. Lykier*, p. 69 ff. (3) In the district of Hierapolis, Tripolis, Attoudda, and along the whole line of Mt. Messogis to the sea. A coin of Tripolis, with the legend ΑΗΤΩ ΤΡΙΠΟΛΕΙΤΩΝ, shows the goddess sitting with sceptre in hand. The type of Leto, carrying the infants Apollon and Artemis, occurs on coins of Tripolis, Attoudda, Mastaura and Magnesia. A coin of Hierapolis has the legend ΑΗΤΩΕΙΑ.ΠΥΘΙΑ. Lethaios at Magnesia, a river flowing out of Mt. Messogis, perhaps means the river of Leto, being Grecised in accordance with the false idea that Λητώ is

<sup>6</sup> Viz., προσδείας. In the same inscription l. 1, for [βαμῶ] read βαθρικῶ; for κορήσκου read κοριάσκου; for Ἀσβε[στ]ῆρ read Ἀσβόλου ν(εωτερου)?; for [ἐπε]τε[λ]ε[σε] read κατέλειψε. ΠΑΠΩΝ seemed certain to me also. Read also ὅσον ἦν πορίσῃς βίον, ᾧ φίλε παροδείτα, εἰδὼς ὅτι τὸ τέλος ὁμῶν τοῦ βίου ταῦτα.

<sup>7</sup> I refer to my paper *Cities and Bishoprics of Phrygia* in the *Journ. Hell. Stud.*, 1883, as C. and B.

<sup>8</sup> Smyrna *Museion* no. τκς, where it is wrongly printed εὐχαρίστη as an adjective.

<sup>9</sup> This must mean "the great goddess of Perga." In publishing this inscription (*Bull. Corr. Hell.*, 1883, p. 263) I did not observe that Leto of Perga is here identical with Artemis of Perga. The inscription is misunderstood by TREUBER, *Lykier*, p. 76. A Messapian inscription has the expression *Artemis-Leto*: see DEECKE, *Rh. Mus.*, 1887, p. 232, who wrongly separates the names by a comma. In both cases, the names Artemis and Leto are applied to the same deity.

connected with *λανθάνω*.<sup>10</sup> (4) In the Katakekaumene, where she is more commonly known as Artemis Anaitis, with a Greek title Artemis and a Persian title introduced by the settlers planted in eastern Lydia by the Persian kings. (5) In Ephesos, where also she is usually known as Artemis. An Ephesian coin bears the legend ΑΗΤΩ. (6) Leto *πρὸ πόλεως* at Oinoanda, *Bull. Corr. Hell.*, 1886, p. 234.

These traces of the worship of Leto the Mother point to its entrance from the south into Asia Minor: if Lykia were its point of entrance, it must have come from Rhodos, but, if Pamphylia be its first seat in Asia Minor, it must have come through Kypros. The pair of deities, mother and son, Leto and Lairbenos Apollon,<sup>11</sup> become in time the triad, Leto, Artemis and Apollon, mother and daughter in the divine nature being distinguished. The Kybele and Attys of northern Asia Minor are probably in origin the same pair as the Leto and Lermenos of the south, borne along a different road and perhaps also at an earlier time: in Ephesos and in the Katekekaumene, the two have met. My friend Prof. Robertson Smith's suggestion that the name *Λατώ* is the old-Semitic *Al-lat*, 'Αλιλάτ of Herodotos<sup>12</sup> (I. 131; III. 8) agrees perfectly with the geographical distribution, and derives additional probability from the agreement.

Hierapolis is a name obviously of the Greek period: the pre-Hellenic name appears to have been Kallatēbos (Herod., VII. 30). Some time between 530 and 553<sup>13</sup> Hierapolis was raised to the dignity of a *metropolis*. A district of Phrygia was separated from the rest of the province and placed under Hierapolis. This arrangement had certainly not taken place in the time of Hierokles (about 530), but is clearly implied at the council of 680.<sup>14</sup> The remodelling of the two Phrygias, which took place under Justinian, was probably the occasion when the new department (which for the sake of a name I call Phrygia Hierapolitana) was formed. Considering how close was the connection of ecclesiastical and political organisation, it is probable that a civil governor, as well as a metropolitan bishop, resided henceforward at Hierapolis until the Provinces were replaced by Themes.

<sup>10</sup> Also known at Ephesos and Stectorion.

<sup>11</sup> On the epithet *Lairbenos* or *Lermenos*, see C. and B., v.

<sup>12</sup> *Al*, the definite article: for another explanation (*Alilat* feminine of *helel*, "the shining one") see SAYCE on HERODOTOS, I. 131.

<sup>13</sup> Hierapolis is a *metropolis* in (Concil. Constantinop. III) A. D. 553.

<sup>14</sup> Where Sisinnios signs *ὡς ἐπὶ ἐμῶν καὶ τῆς ἐκ' ἐμῆ συνόδου*. This was probably the case in 553 also (though not expressly stated), since Hierapolis ranks there as *metropolis*.

In *Notitiae VII, VIII, IX, and I*, the bishoprics subject to Hierapolis were Motella, Dionysopolis, Anastasiopolis, Attouda, and Mossyna. In the late *Notitiae*, a northern district (comprising Kadoi, Aizanoi, Tiberiopolis, Ankyra, and Synaos) was added: this arrangement, which is later than the institution of Themes, has obviously a mere ecclesiastical, and never a political, significance.

III. **MOSSYNA.**—I placed this bishopric (*C. and B.*, p. 377) between Dionysopolis and Laodikeia. The name was known only from the Byzantine lists, and I restored it conjecturally, in an inscription, *ὁ δῆμος ὁ Μο[σσυνέων]*.<sup>15</sup> I can now confirm this by the following inscription, which is the first half of one copied by me in 1883 and published (*C. and B.*, No. 8):<sup>16</sup>

Διὸ Μοσσυνεὶ καὶ τῷ δήμῳ· Γ(αῖος) Νώνιος Ἀπολλωνίου  
υἱὸς Ἀνιηρσίᾳ Διόφαντος, ὁ διὰ γένους ἱερεὺς, τὸ  
ἄγαλμα καὶ τὸν βωμὸν σὺν τῇ ὑποσκενῇ πάσῃ ἀνέσ-  
τησε δὸς ἐκ τῶν ιδίων (δηνάρια) . . τὰ δὲ λοιπὰ οἱ ἐπαν-  
γελιάμενοι καθὼς ὑπογέγραπται· Ἀπολλώνιος β' τοῦ Φιλοξένου  
ΑΝΑΙΞ (δηνάρια)· Ἀπολλόδοτος Διοδώρου ἀγορανόμος  
(δηνάρια) κ'· Ἀπολλόδοτος κ. τ. λ.<sup>17</sup>

ΑΝΑΙΞ is quite distinct. The date of this inscription about A. D. 100, as given when the other part was published, is confirmed by the whole style of the first half and by the name Γάλβας. But, whereas formerly I assigned the inscription to Dionysopolis, it must now be transferred to Mossyna. *Sazak* is a village on the border of the two districts, and the other inscriptions found there (and already published) are certainly Dionysopolitan. The country, which I formerly divided between Mossyna and Metellopolis, belongs entirely to Mossyna. Metellopolis is identical with Motella, in the same neighborhood (see A. XI.).

<sup>15</sup> Formerly I restored *Μο[σσυνέων]*: the correct form is given by the text which follows. The coins published by Mionnet as reading *ΜΟΞΞΙΝΩΝ* are all misread: they belong to the Mostenoi.

<sup>16</sup> Half of the inscription was concealed beneath the floor of the mosque at *Sazak*. In 1883 I could not induce the inhabitants to let me tamper with the planks: in 1887 I got their consent.

<sup>17</sup> The inscription is in a very dark corner of the mosque: in 1887 I procured a small lamp, and read two words more correctly than in 1883: in 5, Γάλβας for Γαλεᾶς, and in 4, Ἀλλειδίων for Ἀλεξιδίων (noted in the publication as uncertain). I find in my old notebook that I had made the second correction in revising the inscription on the stone, and in publishing took the first false reading.

IV. ATTOUDDA.—The evidence that Attoudda (*C. and B.*, xvi) stood at the village of *Assar* is very strong: *C. I. G.*, No. 3950, an inscription erected by the people of Attoudda, is said to have been found at Assar,<sup>18</sup> and an inscription (*Bull. Corr. Hell.*, 1887, p. 348) in honor of a person named Karminios, who certainly belonged to a family closely connected with Attoudda, was copied at Assar by M. Clerc. It is quite certain that Attoudda stood in this neighborhood, and I formerly (*C. and B.*, xvi) accepted the view that the actual site was at Assar. I am now obliged to slightly modify this view, and place Attoudda beside Haz Keui,  $1\frac{1}{2}$  miles west of Serai Keui, and 6 miles N. E. from Assar. No problem in the topography of Phrygia has cost me so much time and trouble as the placing of Attoudda and Trapezopolis, and yet Attoudda was one of the few places whose site was considered certain before I first travelled in Phrygia. The modification I adopt is so slight that it may appear a waste of time to discuss it, and I should not mention it here, if it were not necessary for the placing of Trapezopolis.

As to the actual value of the abovementioned evidence: inser. 1 is attributed by Sherard, who alone saw it, to Aphrodisias. His notes were evidently hasty and inaccurate, as is obvious from the remarks of Franz<sup>19</sup> (*C. I. G.*, No. 3950, and *Add.*, No. 3946): inser. 2 mentions a member of a family which was closely connected with both Attoudda and Aphrodisias (*C. I. G.*, 2782-3), and which therefore may have been connected also with the intermediate city, Trapezopolis. Again, inscriptions might easily be carried from a site near Haz Keui to Assar: though the road is uphill, the distance is not great; and it is also quite possible that an inscription of Attoudda might have been sent in ancient times to Trapezopolis.<sup>20</sup> Finally, it must be remembered that Assar itself is not an ancient site, though it is certainly near an ancient site, which I shall prove to be Trapezopolis.

The district of Phrygia which we have to examine consists of a low

<sup>18</sup> It is wrongly called *Ipsili Hissar*: the name must have been reported by a Greek servant. Assar is the only name known in the district (*A. H. S.*, p. 223: *Bull. Corr. Hell.*, l. c.).

<sup>19</sup> So, *C. I. G.* 338, an inscription of Eukarpia is attributed, through a fault in Laborde's notes, to Eumeneia, 25 miles distant (*C. and B.*, p. 402). Experience teaches me how easily such an error may creep into a road-book. Sherard may have found the inscription at Gereli (see below).

<sup>20</sup> In this way a Prymnessian decree at Nakoleia long produced the false belief that Prymnessos was situated where really Nakoleia stood.

level plain along the Maeander, and of a large tract of hilly country, consisting of alluvium intersected by deep ravines, which extends between the actual valley of the Maeander and the lofty rocky Mt. Salbakos (*Baba Dagħ*, "Father Mount"). In this district two ancient cities existed: one, corresponding to the modern town *Kadi Keui*, was situated somewhere near Assar or Kadi Keui; the other, corresponding to the modern town *Serai Keui*<sup>21</sup> was situated beside Haz Keui. The latter was Attoudda: Men Karou, whose temple beside the Maeander is described by Strabo (p. 481), is celebrated on coins as the chief deity of Attoudda. At the temple, which stood near the Maeander, between Karoura and Laodikeia, *i. e.*, somewhere a few miles west of Serai Keui, a great medical school, following the system of Herostratos, existed in the first century B. C., founded by Zeuxis and Alexander Philaethes. This fact shows that the Anatolian deity Men had some of the character of the Greek Asklepios. No traces of the temple are now known, but this district, lying under the hills, very subject to earthquakes, and full of hot springs of the most varied character, is peculiarly liable to be silted up. The remains of Attoudda also have, in modern times, almost disappeared, which is partly accounted for by the close neighborhood of the rapidly growing town, Serai Keui. The centre of modern life has changed to Serai Keui, but the change is quite recent. The weekly Bazar of the district was held in an open space on the south side of Haz Keui, until thirty years ago, when it was transferred to Serai Keui. Such markets, held not at the modern centres of life, are always good evidence of ancient custom: in some cases they mark the site of an ancient city, now deserted; in others, they continue the ancient meeting-place of a people living in villages without a city-centre. Strabo (p. 341) gives an example of the former: Aleision, a city mentioned by Homer, had ceased to exist, but a market called *Ἀλεσιναῖον* was held near the site. *Kara Eyuk Bazar* is the ancient site, but *Adji Badem* is the government town, in the territory of Themissonion (A. VIII): at Keretapa (A. VII) *Kayadibi* is the Bazar and the ancient site, and *Satirlar* the government town: in the Hyrgalean Plain, *Kai Bazar* is the seat of a weekly market for the district, but is otherwise absolutely deserted: the same is the case at Eriza (B. 6) with *Ishkian Bazar*, and among the Perminodeis (D. 9) with *Kizil Kaya Bazar*.

<sup>21</sup> It is a most useful principle for ancient topography that a modern town almost always exists in the neighborhood of a Græco-Roman town; but the site is usually changed. I hope soon to publish a study of this subject in the *Journal of the Royal Geographical Society*. Kadi Keui is the seat of a Mudir, Serai Keui of a Kaimakam.

I group together the inscriptions of this district, one or two (especially *C. I. G.*, 3951-2) may belong to Trapezopolis, but the most of them are certainly Attouddan: (1) *C. I. G.*, 3948; (2) 3949; (3) 3950; (4) 3951; (5) 3952 and *add.*, Lebas-Wadd. 743, and *A. H. S.*, No. 1; (6) *C. I. G.*, 3953; (7) *Bull. Corr. Hell.*, 1887, p. 348, No. 4; (8) *ibid.*, No. 5; (9) *C. I. G.*, 3947 may belong to this district, but Dr. Sherard mentions it and 3946 as found in *Dere Keui*, and the latter is really an inscription

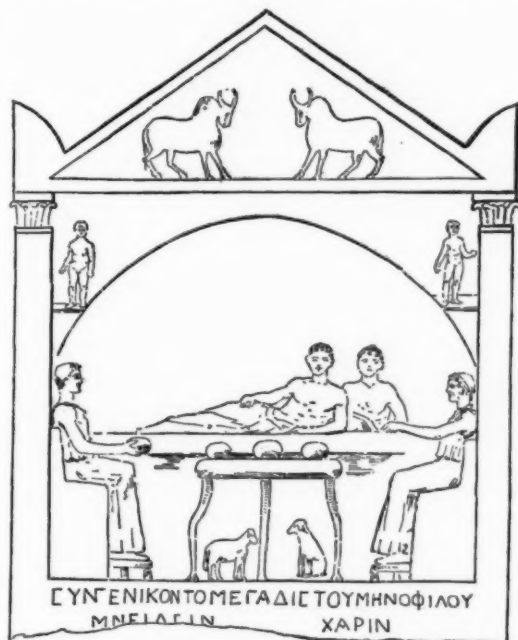


FIG. 19.—Tombstone from Attoudda, Phrygia; found near Serai Keui.

of Sardis; the text which is not understood by Franz ought to be read [τοῦτο τὸ . . . ἀνέθηκεν] Ἐπαφροδεῖτος Ἑρμᾶ? καὶ τὸ ναίδιον. (10) In 1883, I saw, at *Serai Keui*, two tombstones, found in the neighborhood. They belong to Attoudda, and show an interesting variety of the "Sepulchral Feast." I give a sketch of one of them (*fig. 19*). The inscription beneath is *συγγενικὸν τὸ Μέγα δις τοῦ Μηνοφίλου μνείας χάριν*: "The family tomb of Megas, son and grandson of Menophilos,

*in memoriam.*" The second stone had lost its inscription: it was very like the other, but the sheep and dog, instead of being under the table, occupied the angles where the other stone has two children, and three persons reclined at table. (11) Fragment found at Assar (Smith-Ramsay, 1884): broken on three sides, complete on right, except where dots indicate lost letters. It seems to be connected with some local games:

ἀν ΔΡΑΣΙ • •  
 ΟΥΤΟΥΛ •  
 ΞΤΑΤΟ •  
 ἐπὶ ἀγωνο ΘΕΤΟΥΔΙ  
 ονυσίου τοῦ Διονυσίου  
 ἀ ΛΙΠΤΗΝ  
 λονγΕΙΝΙΑΝΟΝ  
 πολυ? ΧΡΟΝΙΟΥ

(12) at Assar: copied by me in 1883:

////////	[ὁ·δεῖνα ···· νο]
ΞΘΕΥΥΕC	ς θεῶ ὑψέC-
ΤΥΕΥΧΗΝ	τω εὐχῆν.

KAROURA was a village 20 miles from Laodikeia on the road to Antioch (and thence to Ephesos). Reading Strabo (p. 579) in the country, one feels no doubt that he places Karoura on the south side of the river. The railway-survey measures 12 English statute miles from Serai Keui to Laodikeia, but the line of the Roman road was straighter, and we may safely estimate 12 Roman miles from Laodikeia to Serai Keui, and place Karoura 8 Roman miles west of Serai Keui on the south bank of the Maeander. Beside Antioch, the Roman road crossed the Maeander by a bridge,<sup>22</sup> and went by way of Nyssa, Tralleis, and Magnesia to Ephesos.

Karoura is unknown in Byzantine times: it was a mere village of the territory of Attoudda. The name is obviously derived from the Attouddan Men Karou: the Greek idea that it meant *Καρίας ὄρια* is merely popular pseudo-etymology.

V. TRAPEZOPOLIS is localised at the site near Assar and Kadi Keui by a series of arguments, which are difficult to state clearly and briefly: Trapezopolis was in the *conventus* of Alabanda, and is reckoned by Ptolemy to Karia:<sup>23</sup> it must therefore have lain west of the Roman

<sup>22</sup> On a coin the bridge has six arches.

<sup>23</sup> Ptolemy's authority would be small, if not supported by PLINY, v. 109.

road from Laodikeia to Kibyra, or it would have been included in the conventus of Kibyra-Laodikeia. Trapezopolis was reckoned to Phrygia Pacatiana throughout the Byzantine period: it cannot therefore have lain in the great plain of Taba, for the towns of that plain, Taba, Herakleia, Apollonia, all belong to Karia. Careful examination of the hills between the plain of Taba and the Laodikeia-Kibyra road, by Sterrett in 1884 and Ramsay in 1886, shows that no city ever existed there except Sebastopolis, which was Karian.

The previous arguments prove that Trapezopolis was on the Phrygo-Karian frontier, west of the Laodikeia-Kibyra road, and that there is no place south of Mt. Salbakos where it could possibly have stood: therefore it must have been north of the mountain, *i. e.*, it must lie in the district between Attoudda and the modern Denizli on the east and Antioch and Aphrodisias on the west. The little that we know about Trapezopolis suggests that it was situated in this neighborhood. The order of Hierokles points distinctly here: he first enumerates the cities of the Lykos valley, Laodikeia, Hierapolis, Mossyna, Attoudda, Trapezopolis, Kolossai. We have alliance-coins of Attoudda and Trapezopolis. The Byzantine evidence tends to connect Trapezopolis with Laodikeia, and on the other hand to connect the cities south of Mt. Salbakos with Kolossai. The situation now given to Trapezopolis explains why it was included neither among the bishoprics subject to Hierapolis nor among those subject to Khonai (see **A. II, VI**).<sup>24</sup> Trapezopolis was formerly placed at Makuf in the plain of Taba. M. Waddington proved long ago that Makuf was the site of Herakleia *ad Salbacum*, and transferred Trapezopolis to Kizil Hissar, but this village is on the Laodikeia-Kibyra road, and is not an ancient site.

#### B. THE PHRYGO-KARIAN FRONTIER.

The Phrygo-Karian frontier lay between Aphrodisias on the one side and Trapezopolis on the other, and one who sees the country is at once led to place it along the long ridge now called Tehibuk Dagħ: the mountain and the frontier pass into the lofty ridge of Salbakos. The rest of the frontier north of Salbakos results from a study of the border cities of Karia. Many of these are very obscure: two, Kidramos and Hyllarima, are not mentioned in Forbiger's *Alle Geographie*.

<sup>24</sup> For a further confirmation, see **B. I. KIDRAMOS**.

<sup>25</sup> *Tehibuk*, a pipe with a long stem.

**B. 1. KIDRAMOS** is assigned to Phrygia by numismatists except Head (*Hist. Num.*). The only ancient authorities, the *Notitiae*, assign it to Karia. But the style of the coins is rather Phrygian,<sup>26</sup> and this would lead us to place the town on the Phrygo-Karian frontier. It also places ΖΕΥC ΑΥΔΙΟC on its coins, which proves that it must have been on the Karo-Lyidian frontier, *i. e.*, in the Maeander valley<sup>27</sup> and near the river. I should expect to discover the site of Kidramos between Antioch and Attoudda, a little west of Karoura, about due south of the modern village Ortakche, on a spur of the hills that fringe the valley.

After this discussion of the sites of Trapezopolis, Attoudda, and Kidramos was written out, I observed a confirmation so striking as to constitute a very strong argument in its favor. Imhoof-Blumer (*Numism. Zft.*, 1884, p. 272) points out that the coins of Laodikeia, Attoudda, Trapezopolis, and Kidramos, agree in giving magistrates' names in the genitive with *διδά*, a peculiarity unknown in any other city: precisely these four cities lie side by side on my map.

**B. 2. HYLLARIMA** is to be looked for in the east of Karia: under the Empire it struck coins whose style suggests the Phrygian rather than the Ionian side of Karia, and it is mentioned in the Byzantine lists: Hierokles has *Harpasa—Neapolis—Hylarema—Antiokheia—Aphrodisias*, which suggests that Hyllarima is to be looked for south of the Maeander and west of the Morsynos.

**B. 3. GORDIOU TEICHOS** is fixed near Kara Su by the route of Manlius (see E). It occurs in no Byzantine lists.

**B. 4. APHRODISIAS.**—The site has long been known, and the ruins are a popular resort for tourists.

### C. THE PHRYGO-LYDIAN FRONTIER.

**C. 1. TRIPOLIS.**—The river Maeander above the junction of the Lykos was, throughout ancient history, the boundary between Phrygia and Lydia. Close on the opposite bank, geographically a part of this district of Phrygia which I call "the Lykos valley," yet historically always a city of Lydia, lies Tripolis. It was in the *conventus* of Sardis, which proves that Ptolemy, when he places it in Karia (so also Steph. Byz., in

<sup>26</sup> Except one: *les types et l'aspect de cette monnaie rappellent tant ceux de certains bronzes de Termessos*: IMHOOF, *Monn. Gr.*, p. 397.

<sup>27</sup> IMHOOF, *l. c.*, who draws the proper inference as to the situation of the city. Zeus *Aéaios* is also known at Sardis but not elsewhere.

his confused and inaccurate remarks), makes a pure mistake. According to Pliny<sup>28</sup> it bore the name Antoniopolis. An inscription of the Roman period calls it *Μαιονίη Τρίπολις*. The Byzantine lists always reckon Tripolis to Lydia, and Herodotos VII. 30 is conclusive evidence that it was Lydian in the fifth century B. C.

**C. 2. BRIOULA** was in the Maeander valley, on the north side of the river, in the district round Nyssa but west of Mastaura,<sup>29</sup> in the *conventus* of Ephesos (Pliny, v. 111). These indications point to the ancient site beside the village of Billara, in which name we recognize the ancient word. Billara lies near the railway station at Kuyujak: Mr. Hogarth, who visited it at my suggestion in 1887, reports that the ancient city is distinct, but inscriptions are wanting. On its coins appear *ΗΑΙΟC* and *ΜΗΤΗΡ ΘΕΩΝ*, in whom we may recognize Lairbenos and Leto (see **A. II. HIERAPOLIS**).

**C. 3. HYDRELA.**—If there were any authority for placing Hydrela in Lydia, the Maeander would then be the boundary between Lydia and Phrygia from the Lykos to the Ionian coast, but the scanty references place Hydrela in Karia. Considering that several authorities place Tripolis and Laodikeia in Karia, it is probable that Hydrela, also, in spite of Livy and Stephanos, should be assigned to Lydia. After the preceding exposition, the statement of Pliny (*N. H.*, v. 105), that it was in the *conventus* of Kibyra-Laodikeia is clear evidence that it lay near Ortakche, and Livy's words<sup>30</sup> agree exactly with this position. The statement of Strabo (p. 650) that the inhabitants of Hydrela, Athymbra, and Athymbrada were transplanted to the new city Nyssa in Seleucid times (which can hardly be quite true), while pointing to some situation in the Maeander valley, gives no precise indication of locality.

The limits of the Kibyrratic *conventus* are now fixed. The *conventus* of Alabanda was bounded on the north by the Maeander, and the two *conventus* of Kibyra and Ephesos touched each other on the north bank between Brioula and Hydrela. Hydrela is never mentioned in Byzantine lists, though it coined money from Hadrian to Geta, and was therefore an independent city under the Empire. It lies on the fron-

<sup>28</sup> *Tripolitani iidem et Antoniopolitae Maeandro adluuntur*: v. 111.

<sup>29</sup> *I. e.*, if we can trust that STRABO's order (p. 650) *Βρίουλα, Μάστουρα, Ἀχάρακα*, is strict.

<sup>30</sup> *Cariam quae Hydrela appellatur agrumque Hydrelitanum ad Phrygiam vergentem*: LIV., 37, 56. \*Τῆρηλα πάλις Καρίας: STEPH. BYZ.

tier of Byzantine Asia, Phrygia, and Karia, and might perhaps be expected in the lists of Asia.<sup>31</sup>

#### A. PHRYGIA.

**VI. KOLOSSAI.**—The name occurs also, in the singular, as that of a city in the Kaystros valley, the modern Keles. This Kolose is also frequently mentioned in Byzantine lists as Koloe, which proves that the lake Koloe near Sardis, and the village Koloe in the Katakekau-mene bear the same name as the Phrygian city: Kolossai, Kolose, Koloe, Keles, are various forms of the same Anatolian name.

Kolossai was a station on the great eastern highway, 8 miles from Laodikeia. The ruins of the city lie on the banks of the Lykos about 3 miles north of the village of Khonas. The ruins of a large church, probably the famous church of S. Michael,<sup>32</sup> could be traced emerging above the soil at least as late as 1881. The natural phenomenon at Kolossai described by Herodotos (VII. 30) has often been discussed by travellers. The explanation given by Hamilton (*Researches in Asia Minor*, I, 511), though generally approved, appears to me wholly unacceptable: violent change in the landscape is in all cases a doubtful hypothesis; but only the supposed necessity of explaining Herodotos could lead any one who had seen the Lykos to suppose that a river which deposits calcareous matter once covered itself over entirely for five stadia and is now quite open. The words of Herodotos<sup>33</sup> describe the common natural phenomenon now called in the country a *duden*, where the water of a high-lying plain finds a subterranean exit and emerges in a large fountain in a lower country. The Lykos rises in such a *duden*, and it seems to me not open to doubt that this is the phenomenon to which Herodotos alludes. His words indeed suggest that the water disappears in the city: but, in the first place, the term Kolossai means strictly the entire state and not merely the space of the city; and, in the second place, I can only apply to Herodotos's account

<sup>31</sup> It is clear that the known conditions would be almost equally well fulfilled if Hydrela and Kidramos were transposed: careful exploration of the situation, which I have seen only from the railway, might decide. If we could find Hydrela in Byzantine Asia, or if Kidramos were known to be in the *conventus* of Alabanda, we should have a definite proof of the correctness of the positions above assigned.

<sup>32</sup> αὐτὸν τὸν περιβόητον ἐν θαύμασι καὶ ἀναθήμασι τοῦ Ἀρχιεπισκοπικοῦ ναοῦ: SCYLITZ., p. 686.

<sup>33</sup> Κολοσσᾶς . . . ἐν τῇ Λύκος ποταμὸς ἐς χάσμα γῆς ἐσβάλλων ἀφανίζεται, ἔπειτα διὰ σταδίων ἐς μάλιστα καὶ πέντε ἀναφαίνόμενος, ἐκδίδωσι: VII. 30.

of Kolossai the remark made by Hirschfeld about his account of Apameia: *er spricht offenbar nicht als Augenzeuge*.<sup>34</sup>

**KHONAI.**—At the Council held in Constantinople in 692 A. D. the bishop of Kolossai is mentioned. In all later notices the phrase is ἐπίσκοπος Χωνῶν ἤτοι Κολοσσῶν,<sup>35</sup> or simply ὁ Χωνῶν. The earliest instance of the name Khonai known to me is *Concil. Nicaen.* II, A. D. 787. In the lists of cities whose names have been changed (Parthey, *Hierokles*, etc., *app.*), Khonai is given as the later name of Kolossai; and this view is commonly accepted. The actual fact, however, is that Khonai was a new city, in a different situation, which dwarfed the old city of Kolossai. Kolossai stood in the open plain, in a most exposed situation, and could not be made a strong city. Its defenceless condition was no disadvantage in the Roman and early Byzantine time, while it was conveniently situated so that the high-road along the Lykos valley passed through its gates. But when the troubled times began, and when the whole of Asia Minor was exposed to the ravages of Arab armies, the situation was a serious disadvantage: a new city with a strong citadel on an outlying peak of Mt. Kadmos grew up, and attracted the population of Kolossai. It is possible that the change was hastened by an actual sack of the old city, but as to this we have no information.<sup>36</sup> The change from Kolossai to Khonai occurred between 692 and 787, in the period when the Byzantine empire was weakest and the Arab incursions most wide-spread and dangerous. Khonai, the most powerful fortress in the Lykos valley, was probably (though no actual authority exists among the miserably scanty records of the social history of Anatolia) a *thema* or station for troops. In 857 it was raised to the rank of an archbishopric. Photios, who had just been irregularly appointed to the Patriarchate of Constantinople, desired to strengthen his cause by the support of the Roman Pontiff: he sent the bishops of Amorion and Khonai as envoys to Rome, honoring the latter with the title of archbishop (see *Vit. S. Ignatii*, in *Mansi Act. Concil.*, XVI, p. 235). In the earlier and intermediate *Notitiae*, Khonai is never mentioned, and along with it are omitted four bishoprics of

<sup>34</sup> *Kelainai-Apameia*, pp. 11, 19, in *Berlin. Abhandl.*, 1885.

<sup>35</sup> In all cases which I have observed, this phrase (e. g., Ἀπόλλωνος ἱεροῦ ἤτοι Ἀετοῦ, Στρατονικέας ἤτοι Καλάνδρου) has the same meaning: the two names denote not the same but different cities; the centre of population has changed, or is changing, to a new site.

<sup>36</sup> In *Mittheilungen (Athen.)* 1882, I explained the relation between Khonai and Kolossai, and compared it with the history of Prymnessos and Akronios.

southern Phrygia, Keretapa, Themissonion, Sanaos, and Valentia: the five form a well-marked group, and a line drawn around them cuts off the whole southern district of Pacatiana. The inference is, that, in the year 857 or very soon after, this district was separated from the metropolis of Laodikeia and subjected to the metropolis of Khonai. The fact that Khonai is entirely omitted from the *Notitiae* of this period (I, VIII, IX) proves that the lists there given are not absolutely complete, and we shall find another omission in the case of AKMONIA.<sup>37</sup> In the latest *Notitiae* (III, X, XIII), Khonai is mentioned as a metropolis, without any dependent bishoprics, and Keretapa, Themissonion, and Sanaos reappear among those dependent on Laodikeia. Such variations are not uncommon: e. g., Eukhaita has four dependent bishoprics in *Not.* X, but in *Not.* III: τῷ Εὐχαιτῶν θρόνος ὑποκείμενος οὐκ ἔστι.

VII. KERETAPA (*C. and B.*, xv).—I previously followed Professor Kiepert's opinion, that Keretapa was situated on the Adji Tuz Göl, on the road from Laodikeia and Kolossai to Apameia, with the necessary correction of transferring the site from Tchardak at the western end of the lake, where no Græco-Roman ruins exist, to Sari Kavak, on the lake not far from its northeastern end. I have, however, found it necessary to desert the old view: Sanaos was situated at Sari Kavak.

Keretapa was in all probability situated at Kayadibi, and the ΑΥΑΙΝΔΗΝΟΞ of coins is the lake that lies between Kayadibi and Salda. The evidence may be put briefly thus. The order in Hierokles puts Keretapa and Themissonion together in southern Phrygia: Ptolemy agrees: the site at Kayadibi was in Phrygia, and it is not possible to put any other city there except Keretapa. Some slight arguments also tell directly in favor of placing Keretapa at Kayadibi. (1) Its territory then adjoins Kolossai and Themissonion, and Hierokles mentions the three cities together. (2) The name Diokaisareia, which was applied to it, is explained by the inscription on an altar at Kayadibi (A. H. S., No. 54) Διεὶ Καίσαρι: there was at this place a cultus of Cæsar as Zeus, and the city might readily acquire the name Diokaisareia. (3) In the brief account of S. Artemon<sup>38</sup> it is told that Patricius, Comes and governor of Phrygia-Pacatiana, proceeding from

<sup>37</sup> See my *Cities and Bishoprics*, No. xxii, in J. H. S., 1887.

<sup>38</sup> *Acta Sanctorum*, October 8th, p. 46. The title *Comes* applied to the governor, shows that the life of the saint was composed later than 536 A. D. The scene is laid under Diocletian. A mere abstract is given by the Bollandists: if any fuller ms. of the biography of Artemon exists, it would probably contain much local detail.

Laodikeia εἰς τὴν Καισαρέων [read [Διο]καισαρέων, there is no city Kaisareia in the province] πόλιν, arrested Artemon on the road three miles from Laodikeia. At Kaisareia [Diokaisareia] Artemon produced by his prayers a lake, whereupon Vitalius the priest and many others were converted.<sup>39</sup> (4) There is some reason to think that Khonai and Keretapa were conterminous. An appearance of S. Michael of Khonai at Keretapa on Sept. 6th is celebrated by the Greek Church: Le Quien (*Or. Christ.*, I, 813) uses the expression (which he either infers from this appearance or derives from some *menologion* unknown to me): *Chonae, quae juxta Ceretapa*. Kayadibi and Khonai are divided only by mountains, no other city intervenes, and there is no other site unappropriated whose territory could be conterminous with Khonai. (5) A coincidence connected with the name is of some interest, if it be not unreal. Keretapa seems to belong to the large class of Anatolian names containing the element KEP, to which class perhaps the national name "Karia" belongs. The second part, *tapa*, seems to be the same word as the Karian *taba*, "rock."<sup>40</sup> *Kayadibi*, in Turkish, means "under the rock;" and the most remarkable feature in the situation is a lofty peak on the north, which rises so abruptly that it seems actually to overhang and overshadow the town. (6) This position of Keretapa explains its omission in some *Notitiae* (see KOLOSSAI).<sup>41</sup>

The bishops of Keretapa are often mentioned in the Councils of the fifth, sixth, and seventh centuries. In 359 A. D., Theodoulos, bishop of Keretapa, seems to be a dignitary of some consequence, and not of an obscure town. The coinage is rich, from Augustus onwards. A fertile country of great extent belongs to the city, and it lay on the Roman road from Themissonion to Takina and Apameia.

With regard to the reported pre-Hellenic rock-sculptures of Karat-li, close to Kayadibi:<sup>42</sup> I went to examine them in 1886, and found only three figures nine inches high, in a niche—rude village-work of the Roman period.

<sup>39</sup> διὰ προσευχῆς ἐν τῇ τόπῳ ἐκείνῃ ἐξήγαγεν ὕδωρ πολὺ: the ἐξ shows that ὕδωρ cannot mean rain, but either a fountain or lake. Artemon was presbyter in Laodikeia, and Sisinnius bishop.

<sup>40</sup> STEPH. BYZ., s. v., *Taba*.

<sup>41</sup> On the top of the hill overhanging Kayadibi are extensive ruins of one of the most curious, probably pre-Hellenic, fortifications that I have seen in Asia Minor. H. A. Brown and I visited them late one evening in 1886: we found nothing except great lines of walls formed of loose small stones, surrounding a considerable extent of country.

<sup>42</sup> DAVIS, *Anatolica*, p. 135; PERROT, *Hist. de l'Art*, IV, p. 742.

VIII. **THEMISSONION.**—M. Waddington proved conclusively, many years ago,<sup>43</sup> that Themissonion was in the valley now called Kara Eyuk Ova. Defective knowledge of the district led him to place it at Kadja Hissar,<sup>44</sup> and to make some incorrect statements about the topography: but his proof is a masterpiece of topographical analysis, and leaves me nothing to do except to apply it to the proper site, Kara Eyuk Bazar.<sup>45</sup>

Pausanias (x. 32) mentions Themissonion τὸ ὑπὲρ Λαοδικείας as a city of Phrygia, and says that a large cave 30 stadia from the city sheltered all the inhabitants from the invading Gauls. In front of this cave stood statues of Herakles, Apollon, and Hermes, which embody different aspects of the character of the native deity. Coins show that the chief deity of Themissonion was ΑΥΚΑΒΑΣ<sup>46</sup> ΞΩΖΩΝ. The Saving-god—*Theos Sozon*—was worshipped in Antioch Maandr. (a coin reads ΩΖΩΝ) and in various parts of Kabalis. A number of monuments of this cultus have been described by M. Collignon (*Bull. Corr. Hell.*, iv, p. 291; pl. ix) and Mr. Smith (*A. H. S.*, p. 236). I copied a rude and very faint inscription below one of the reliefs mentioned by M. Collignon:<sup>47</sup>

NICEPMOΓΕ  
NOYHPAKΛIEY  
XHN

Mῆ]νις Ἑρμογέ-  
νου Ἡρακλ(ε)ῖ εὐ-  
χὴν.<sup>48</sup>

An inscription on the rocks at Tefenni<sup>49</sup> (incorrectly published, *A. H. S.*, p. 236), also beneath a relief, ought to be read *Μενέλαος Μήνιδος*

<sup>43</sup> *Bull. Archéol. de l'Athenaeum Français*, 1855: reprinted in *Mél. Numism.*, i, p. 107.

<sup>44</sup> Kai Hissar or Kaya Hissar (Kaja Hissar, where *j* represents *y*, is mistaken and given according to the French spelling as Kadja) is the proper name. It is not an ancient site.

<sup>45</sup> "The Bazaar of the Black Mound," a large tumulus beside the village: the valley takes its name from the village on the ancient site. Adji Badem, "Bitter Almond Tree," is the seat of the governor, a Kaimakam.

<sup>46</sup> Mr. HEAD has ΑΥΚΙΟΣ ΞΩΖΩΝ.

<sup>47</sup> These reliefs are in a rock at the village Yuvalik, which is strangely misspelt by MM. Duchesne and Collignon, "Djouk Ovarlak": *Yuzu* is a kind of tree, *lik* is the collective termination.

<sup>48</sup> M. Collignon gives one line of an inscription, below one of these rock-reliefs, which either is an incorrect copy of my line 2, or is a second instance of the name Herakles applied to this god.

<sup>49</sup> Tefenni is quite near Yuvalik.

Ὁροφύλα[κι] εὐχὴν· ἔτους σορ'<sup>50</sup>: the deity to whom the vow is paid is almost invariably specified in inscriptions. We have, therefore, three names for this god: Orophylax, Sozon, and Herakles. The first is a mere title; the third identifies him with a Greek deity to whom he shows some analogy; Sozon is more remarkable. The following inscription from Sinda (which I copied in a cemetery beside Aghlan Keui in 1884, and which therefore belongs to the same district as the rock-reliefs) throws some light on it:

MHNICATTOΛΩΝ

OYEAΥTΩZΩN

KAINANATHΓYNA

ZΩCH KI

IEPEYCAΔHMHTPOC

KAICAOAZOY

Μῆνις Ἀπολ(λ)ων[ί-

ου ἐαυτῷ ζῶν

καὶ Νάνα τῇ γυναι[ί]κι

ζώσῃ

ιερεὺς Δημητρὸς

καὶ Σαοάζου.

*Saoazos* is a variant of the commoner *Sabazios*, and is probably nearer the pronunciation of the district. The worship of Sabazios has been recognised at Tefenni by MM. Duchesne and Collignon, and there can be little doubt that this "Saviour-god," who was the great object of worship in the district, is simply the well-known Phrygian Sabazios. The name Sozon was, I believe, suggested as a Greek title of suitable meaning approximating in sound to the native Saoazos. The series of figures of various types, a horseman bearing club or battle-axe and sometimes with radiated head, must be interpreted as representing Sabazios; and the common type on Phrygian, Pisidian, and Lydian coins, which Mr. Head catalogues as an Amazon, ought to bear the name Sabazios. A dedication Ἀπόλλωνι καὶ Μητρὶ Ἀπόλλωνος (*Bull. Corr. Hell.*, II, p. 174), i. e., Apollon and Leto, may serve to prove that in this district Sabazios was the name given to the son of the goddess Leto, and may show us the cultus of Leto at an intermediate point between Perga and Hierapolis (see II).

The worship of Men in the same district is also vouched for by inscriptions, both published and unpublished. Men and Sabazios appear to me almost equivalent names. The idea that Men was the moon-god is due to popular etymology identifying the name with the Greek word for "month." The crescent horns, which in many representations mark him as the moon-god, are, I think, a mere misunderstanding of archaic wings on the shoulders.

<sup>50</sup> I read σορ' on the rock: my copy indicates no doubt. Mr. SMITH prints ΣΟΡ, and transcribes (ε)σορ'.

## B. THE PHRYGO-KARIAN FRONTIER.

Following the lines of Diocletian, I shall enumerate under Karia the next towns south of Themissonion. The frontier lay, as is plain from Hierokles, between Kibyra and Themissonion. I shall now show more narrowly that it lay between Themissonion and Phylakaion, and north of the river Indos.

**B. 4. PHYLAKAION** or Pylakaion is mentioned only by Ptolemy, as in southern Phrygia, and by *Geographus Ravenn.*, which proves it to have been on a Roman road. We have now completely exhausted southern Phrygia except the road between Themissonion and Kibyra. Beside Derekeui, about 9 miles south of Themissonion, on the road to Kibyra, there is an ancient site. Now in the Peutinger Table we find:

"Laudicium Pylicum

Temissonio XXXIIII Cormassa XII Perge."

It is usual to understand Laudicium Pylicum as *Laodikeia ἐπὶ Λύκῳ*; but, first, the Table was taken from a Latin, not a Greek source;<sup>51</sup> secondly, ἐπὶ Λύκῳ does not explain the termination of Pylicum. In *Pylicum* I recognize Pylakaion, and find two roads mixed and confused in the Table:

"(1) Cormassa [XXI Comama XIII Cretopolis XXVI] Perga. (2) Laodiceia XXXIIII Themissonion [IX] Pyliceum [XX Cibyra XXXVI Isinda] XII [Termessos XVIII] Perga."

Phylakaion may be recognized in the Byzantine period. The last three names on Hierokles' Karian list are *Χωρία Πατριμόνια, Κιβύρα, Κοκτημαλικαί*: the last is obviously corrupt: the beginning is assimilated to the preceding Kibyra, and the word is Ktema-likai. The original form was Ktema [Py]likai[on], and *Χωρία Πατριμόνια* is a dittography. If Phylakaion was an imperial estate, we should then understand why it alone of all the towns on this road did not coin money.

This position of Phylakaion near the Lykian frontier is confirmed by a passage in Ptolemy v. 2. 27, which should be read *παρὰ μὲν τὴν Λυκίαν Φυλακήνσιοι*<sup>52</sup> *καὶ Θεμισώνιοι, παρὰ δὲ τὴν Βιθυνίαν Μοκκαδηννοί*[?] *καὶ Κιδυησσεῖς, ὑφ' οὗς Πελτηνοί*[?], *εἶτα Μοξεανοί, εἶτα Λυκάονες, ὑφ' οὗς Ἱεραπολίται*. With this slight change, which crept in through the similar beginning of *Λυκάονες* and *Λυκίαν*, the geographical order is correct: on *Μοξεανοί* see my *C. and B.*, p. 422; the Lykaones

<sup>51</sup> Compare *Tivium* [T]rogmor[um], *Massilia Grecorum*, etc.

<sup>52</sup> This form can hardly be correct. *Μοκκαδηννοί* should be *Μακ(εδόνες) Καθηνοί*.

are the people in the valley called Cutchuk Sitchanli Ova between Sandikli and Afom Kara Hirsar, immediately east of the Moxeanoi, and I long ago proved that the Hierapolitai are the people of the Sandikli valley.<sup>53</sup> The proper form of the name is uncertain: Pylik[ai]um (*Tab. Peut.*), [Phy]likai[on] (*Hier.*), Pylakaion and Phylakaion (*Ptol.*), Filaction (*Geogr. Ravenn.*) all occur. The forms in Ptolemy are probably Grecised to suit a supposed connection with φύλαξ.

B. 5. ERIZA, which lies near Ishkian Bazar, between Phylakaion and Kibyra,<sup>54</sup> is mentioned by Hierokles as Erezos, and in the *Notitiae* as Siza. Included in Phrygia, before the time of Diocletian, it was thenceforward comprised in Karia. A few coins ΕΡΙΖΗΝΩΝ exist.

A milestone, which I copied at Tcham Keui in 1884 (probably in the territory of Eriza), belongs to the Roman Road, Themissonion-Kibyra:

ΤΟΙΣΘΕΩΝ

ΑΥΤΟΚΡΑΤΟ

ΣΕΠΤΙΜΙΩΣΕΥΗ

ΤΙΝΑΚΙΣΕΒΑΣ

ΑΔ ΗΝΙΚΩΠ

ΚΑΙΑ ΟΚΡΑΤΟ

ΑΥΡΗΛΙΩΑΝΤΩΝ

ΣΕΒΑΣΤΩ

//////////

ΓΑΛΩΝΙΑ

ΣΕΒΑΣΤΗΙΗΤΓΙΛΑΚΑ

ΛΙ ΟΙ 'ΒΥΙ

Τοῖς Θεῶν [ἐπιφανεστάτοις

Αὐτοκράτο[ρι Καίσαρι Λ.

Σεπτιμίῳ Σευή[ρῳ Περ-

τίνακι Σεβασ[τῷ Ἀραβικῷ

Ἀδ[ιαβ]ηνικῷ Π[αρθικῷ

καὶ Α[ὐτ]οκράτο[ρι Καίσαρι Μ.

Αὐρηλίῳ Ἀντων[εῖνῳ

Σεβαστῷ[καὶ Π. Σεπ-

[τιμίῳ Γέτῳ νιῷ? τῶν]

με]γάλων [Β]α[σιλέων καὶ Ἰουλίᾳ

Σεβαστῇ μητέρα (*sic*) Κά[στρων.

Ἀ[π]ὸ [Κ]ιβύ[ρας Μιλια δυνάδεκα?

The inscriptions found at Asha Dodurga and Yokari Dodurga also belong to the territory of Eriza: these are *C. I. G.*, 4380 *r, s, t, u, v.*; and *Bull. Corr. Hell.*, 1885, p. 324.<sup>55</sup> Others, copied by Sterrett and myself in 1884, will shortly, I hope, be published by him. These prove that the people considered themselves Pisidians, as Strabo also (p. 570) must have done, and that they probably used the era of Kibyra, A. D. 25.

B. 6. SEBASTOPOLIS of Karia occurs in Hierokles, not in the *Notitiae*. Its apparent omission must be due to the fact that the official name Sebastopolis was replaced by the old native name:<sup>56</sup> it is uncertain

<sup>53</sup> *Trois Villes Phrygiennes* in *Bull. Corr. Hellén.*, 1882.

<sup>54</sup> On the exact situation, see E.

<sup>55</sup> Understanding that the name *Durdurkar* is a mistake for Dodurga or Todurga.

<sup>56</sup> So in late Byzantine time Diokaisareia of Isauria becomes Prkana.

which of the strange names *Ταπασσῶν, Μετάβων, Προμισσοῦ, Ἀνωτε-  
τάρτης* is to be given to Sebastopolis. Its discovery is due to Schönborn.

**B. 7. SINDA** is mentioned only by Livy (see E). It was apparently a small place, which was merged either in Kibyra or in Eriza.

**B. 8. KIBYRA** was, under the Roman Empire, along with Eriza and Phylakaion, reckoned to Phrygia, and the tone of Kibyratie inscriptions tends to connect it with the country to the east rather than with Karia and the west. The frontier of Byzantine Karia and Pamphylia lay between Kibyra and Lagbe. It is clear that, as might be expected, the rearrangement of the provinces interfered very little with the old lines of demarcation. Phrygia and Karia were carved out of the single Asia, but the line separating Lykia-Pamphylia from the older Asia continued to separate them from the new Karia-Phrygia.

#### A. PHRYGIA.

**IX. TAKINA.**—For the full text,<sup>87</sup> and an account of the inaccurate copies previously published, of the important inscription which gives this name, see A. H. S., No. 12. Takina is mentioned also by the *Geogr. Ravenn.* as Tagina, and by Ptolemy as Γάξηνα (which must be corrected to Τάγνηνα). I know no other instances of the name. Takina, being mentioned by the *Geogr. Rav.*, must have stood on a Roman road.<sup>88</sup> This is confirmed by the milestone (Smith-Ramsay, 1884; <sup>89</sup> *Ephem. Epigraph.*, v, p. 593). It is one of the series erected on the roads of Asia, from the Hellespont to the Pisidian frontier, by Manius Aquillius, about 130 B. C. The number engraved on it in Greek and Latin is ΚΚΓ, CCXXIII, which, like all others on the milestones of Aquillius, must be the distance from Ephesos. Now the distance from Takina by the nearest pass to Kolossai and Laodikeia, and thence by the ordinary road (see V. **ATTOUDDA**) to Ephesos, is only about 166 Roman miles. It is plain, therefore, that the Roman road made a circuit, and that the distances were measured for all the way along the road. There are only two possibilities: the distance may have been measured by way of Laodikeia, Themissonion, Keretapa; or by way of Laodikeia, Apameia, and the shore of Lake Askania. The distances along both are given in

<sup>87</sup> In l. 7 he reads Βασιλότης, assuming a name Βασιλότης: it would perhaps be better to read Βασιλῶ τῆς θυγατρὸς. His transcription of the other Takinaean inscriptions contains several errors, which can be easily corrected by any reader.

<sup>88</sup> The obvious close relation to *Tab. Peut.* makes this practically certain.

<sup>89</sup> I again verified the text in 1886.

the following table: from Ephesos to Attoudda, I take the distance as measured along the railway, and for the rest I depend on my own map drawn, with the aid of a survey, in preparation for a proposed extension of the Ottoman railway to Apameia. My map is on the scale of 4 English statute miles per inch: I measured with a compass the number of inches along the line of the road, assuming that it ran straight from inch to inch, and added one in twenty for the necessary winding of the road.

Ephesos		Ephesos	
Attoudda	93	Laodikeia	107
Laodikeia	107	Apameia	173
Themissonion	141	Mallos (Kilij)	191
Keretapa	162	Adada (Elles)	205
Takina	176	Takina	223

From this table it follows that Aquillius measured along the great eastern highway, which, from 400 B. C. to 300 A. D., formed the backbone of Anatolian communication, as far as Apameia, and then turned down southwards round the frontier of the province. He carried the road at least as far as Takina, but there can be little doubt that it was continued to Keretapa and Themissonion either by him or in later time. It is also obvious, from the table, that the Roman road took the shortest possible line. The distance measured along the line of the rails, existing or projected, from Ephesos to Apameia is  $178\frac{1}{2}$  English statute miles: according to the above table, the distance in Roman miles along the same road is 173 miles. The line of the road does not actually lie through such cities as Magnesia, Tralleis, Nyssa, Antiokheia:<sup>60</sup> and the table shows that the sum of separate distances from city to city must be decidedly greater than the distance from end to end.

The line of the road constructed by Manius Aquillius must have been on Roman soil: lake Askania must therefore have been the boundary between Roman Asia and non-Roman Pisidia. It is probable,<sup>61</sup> that the same boundary continued between Asia and Pisidia, first when the latter became Roman and was attached to the province of Galatia, and afterwards when a great part of Pisidia was attached to the new

<sup>60</sup> Apameia, Laodikeia, Karoura, on the other hand, are directly on the line of the road.

<sup>61</sup> It cannot however be inferred with certainty that the whole line of road must have always continued to be in the same province. The road Kibyra-Alaston is measured from Kibyra in Asia, and yet runs for the most part through Pisidia (see below).

province of Lycia-Pamphylia by Vespasian. The Roman cities at Elles and Kilij were therefore probably cities of Asia.

Takina is not mentioned in the Byzantine lists: Hierokles, however, mentions Valentia in this part of Phrygia, and Valentia is mentioned as a bishopric in the Councils of 451 and 553. These references show that Valentia was a temporary name of a bishopric which in earlier and later time must occur under a different name. Takina and Valentia are therefore probably the same. In the earlier classes of *Notitiae*, Takina-Valentia is omitted with the rest of this district (see KOLOSSAI). In *Notitiae* of the latest class, it is perhaps included in the bishoprics of Pamphylia Tertia (see D).

We have seen that Elles must have been in Asia at the time of Aquilius, and that it would probably continue attached to that province till Diocletian's time. But geographically it is connected with Pisidia rather than with Phrygia. A coin of Adada (Mionnet *Supplem.* and Friedländer's *Appendix* to Hirschfeld) gives a magistrate's name; and, according to M. Waddington's law, this proves that Adada was in the province Asia. But Ptolemy's authority and other considerations place Adada in Pisidia. The order of Hierokles leads me to place Adada at Elles, and this position explains the contradiction among the authorities. The legend ΑΔΑΔΑΤΩΝ on the coin above quoted is misunderstood by Friedländer: it should be accented 'Αδαδατῶν, as genitive plural of an ethnic 'Αδαδάτης, used for the commoner 'Αδαδεύς. The name Elles, more correctly Elyes or Ilyas, is a corruption of Saint Elias, who was therefore the saint of the church of Adada. The order of Hierokles makes Kilij the site of Mallos, which is doubtless the Mallos πρὸς Χῶμα Σακηνόν of Pisidian inscriptions: in that case Χῶμα Σακηνόν is perhaps the fine mountain called by the Turks Ai Doghmush ("the Rising Moon"), south of Apameia.

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[To be continued. N. B. The map which is to accompany this paper will appear in Part II.]

## MITTHEILUNGEN AUS ITALIENISCHEN MUSEEN.

[TAFEL XXXI, XXXII.]

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### I.

Es ist nicht zu leugnen, dass die aus Aegypten stammenden, griechisch-römischen Denkmäler, welche sich zum grössten Theile in den aegyptischen Museen Englands und des Continents verbergen, im Allgemeinen noch wenig Beachtung finden. Zwar haben die Ausgrabungen in Naukratis wiederum die Aufmerksamkeit auf die Ansiedelungen der Griechen im Nildelta gelenkt und auch über ihre künstlerische Thätigkeit wichtige Aufklärungen gebracht. Aber von den Denkmälern, welche die griechische Kunst in Aegypten zur Zeit der Ptolemaier hervorgebracht hat, sind bisher verhältnissmässig nur wenige bekannt gemacht worden. Ich betrachte es als ein günstiges Vorzeichen, dass der erste Jahrgang diesser Zeitschrift mit der Publikation einer Anzahl bemalter, in Alexandria gefundener Vasen eröffnet wurde, deren Inschriften von Herrn Augustus C. Merriam in dankenswerther Weise besprochen worden sind, während Technik und Stil der Malereien noch eine genauere Untersuchung verdienen. Ich füge jetzt ein Bildwerk herzu, welches mir geeignet erscheint auf eine andere Seite der alexandrinischen Kunst einiges Licht zu werfen.

Der auf TAFEL XXXI von beiden Seiten abgebildete Gegenstand ist eine kleine, etwa 10 mm starke Platte aus Serpentin; sie befindet sich in der Sala dei Papiri des aegyptischen Museums zu Turin, wo ich im Sommer 1886 Gelegenheit hatte sie zu untersuchen. Die Breite der Platte beträgt 0.092 m., die Länge 0.180. Beide Seiten derselben sind mit vertieften Reliefdarstellungen bedeckt, welche in der nach einem Gypsabguss hergestellten Reproduktion erhaben erscheinen. Aus der meist sehr starken, einige male aber ganz schwachen Vertiefung diesser eingravirten Gegenstände lässt sich schliessen, dass der Stein theils als Gussform, theils als Stempel gedient hat. Im ersteren Falle wurde das flüssige Metall in die hohle Form gegossen und bis zum Erkalten darin gelassen. Auf diese Weise konnten natürlich

nur Halbfiguren oder reliefartige, auf einer Seite verzierte Platten gewonnen werden. So ist ohne Zweifel bei der Herstellung der Gefässhenkel verfahren worden, welche auf der einen Seite des Steines eingeschnitten sind (B, 11. 12) und welche nach dem Rande der Platte zu keine Abflussrinne zeigen. Um ein Rundbild zu giessen, musste eine zweite, jetzt verloren gegangene Platte aufgelegt werden, deren Vertiefungen die andere Hälfte der zu giessenden Figur enthielten. Das genaue Aufeinanderpassen beider Formen konnte dadurch gesichert werden, dass einige vorstehende Zapfen der Deckplatte in entsprechende Zapfenlöcher der unteren eingriffen. Vielleicht dienten die Löcher auf der Plattenseite A nr. 1 und 5 und B, 6, in welchen aber auch kugelförmige Gegenstände gegossen werden konnten, zugleich diesem Zwecke. Zum Eingiessen des Metalls sind überall schmale, nach dem Rand zu sich verbreiternde Eingussrinnen angebracht. Wo diese fehlen und die Gravierung sehr schwaches Relief zeigt, kann der Stein nur als Stempel, zum Einpressen des Musters in dünne Metallbleche gedient haben. Dieses Verfahren nehme ich an für die Darstellungen B, 8. 1 und 4, sowie für das Eppichblatt (σέλινον) inmitten der anderen Plattenseite.<sup>1</sup>

Die Bestimmung und Bedeutung der meisten, in dem Stein eingravirten Gegenstände ist ohne weitere Erklärung deutlich. Auf der Seite A sind ausser verschiedenen Henkeln, wie sie an Metallgefässen der hellenistisch-römischen Zeit ganz gewöhnlich sind, eine stehende Sphinx in Vorderansicht und ein Krokodill zu erkennen. Auf Seite B nr. 10 ein Ohrgehänge; B, 3 eine weibliche Maske. Nr. 2 und 9 sind die Vorderseiten von Figuren des Harpokrates und des Sarapis, beide in bekannter Auffassung. Harpokrates stehend, mit dem Füllhorn in der Linken, den rechten Zeigefinger an den Mund legend, über der Brust mit einem Fell bedeckt, dessen Zipfel an seiner linken Seite niederzuhängen scheinen. Auf dem Haupte trägt er anscheinend die Doppelkrone von Ober- und Unteraegypten. Dasselbe Mo-

<sup>1</sup> Ein Formstein, welcher als Stempel zum Einschlagen in Metallplatten dienen soll, muss meines Erachtens aus einem hinreichend festen Material bestehen. Aus diesem Grunde kann ich nicht glauben, dass die von CURTIUS (*Das archaische Bronzerelief aus Olympia*, Tafel III, fig. 6) publicierte Form aus Athen, welche aus Talk besteht, ursprünglich bestimmt gewesen sei "dünne Silberbleche hinein zu drücken und zu hämmern." Eine wirklich zum Einstampeln dünner Bleche verwendete Hohlform ist in Olympia gefunden worden und im vierten Bande Tafel 26, a der "*Ausgrabungen von Olympia*" photographirt. Diese Hohlform ist aber aus Erz gegossen.

tiv zeigt z. B. die Bronzestatuetten der Sammlung Louis Fould, publieirt von Chabouillet, *Description des Antiquités du cabinet L. Fould*, pl. 13 (vergl., pl. 14). Die Figur des sitzenden Sarapis hat den dreiköpfigen Cerberus zur Seite und streckt in der Rechten eine Schale vor, während die Linke ein Scepter aufstützt. Es ist ein aus Münzbildern wohlbekannter Typus, über welchen zuletzt Adolph Michaelis im *Journal of Hellenic Studies*, VI, 1885, p. 309 (pl. E, 14) gehandelt hat.

Formsteine, wie dieser in Turin befindliche, sind mehrfach bekannt. François Lenormant hat ein sehr ähnliches Exemplar aus der Sammlung Raifé mit folgenden Worten beschrieben: "Moule à fondre les métaux en stéatite, ayant appartenu à un bijoutier gréco-égyptien. Sur une des faces sont les creux d'un manche de patère, d'une figurine de Patèque, d'une figurine d'Harpocrate, et d'une sorte de bouton circulaire décoré d'un masque de face. De l'autre côté sont les creux de deux boucles d'oreilles, dont une décorée d'une tête de lion."<sup>2</sup> Was Lenormant von diesem Beispiel vermuthet, gilt wegen des Fundortes mit noch grösserem Rechte von dem turiner Stein. Beide Formen stammen ohne Zweifel aus griechisch-ägyptischen Werkstätten und sind Werkzeuge alexandrinischer Toreuten gewesen, über deren Thätigkeit wir auch sonst vereinzelte Zeugnisse in der Literatur und unter den Monumenten besitzen.<sup>3</sup> Denselben Ursprung dürfen wir vielleicht für eine ebenfalls aus Serpentin gearbeitete Hohlform im fünfzehnten Saale des Lateranischen Museums in Rom mit dem Bilde einer Sphinx und eines Apisstieres vermuthen. Wenn diese letztere Form auch in Ostia gefunden wurde, so kann sie doch ebenso wohl aus Alexandrien importirt sein, wie der in Ostia bestehende Kult des Sarapis (Mommson, *Römische Geschichte* V, 577). Für die Verehrer dieses Gottes waren wahrscheinlich die kleinen Votivbildchen bestimmt, welche ein Goldschmidt von Ostia mit Hülfe des lateranischen Formsteines herstellte.

Wichtig ist auf dem Turiner Exemplar das wiederholte Vorkommen von Henkeln einer bestimmten, in der griechisch-römischen Zeit sehr beliebten Form. Sie finden sich meist an runden Schalen, deren Hauptschmuck sie bilden, oft auch vereinzelt, da der aus dünnem Blech

<sup>2</sup> LENORMANT, *Descript. des antiquités de la coll. de feu M. A. Raifé*: Paris, 1867 p. 108 nr. 819.

<sup>3</sup> Einige Notizen über die alexandrinische Toreutik habe ich zusammengestellt in der Abhandlung *Die Grimanischen Brunnenreliefs in Wien*; Leipzig, 1888, Anmerkung 35-37.

getriebene Gefässleib der Zerstörung leichter ausgesetzt war. Vollständig erhaltene Gefässe besitzt z. B. die wiener Sammlung; Henkel allein kommen in den Museen häufiger vor (vier Stücke, welche im turiner Museum aufbewahrt werden, sind bei Arneth, *Die antiken Gold- und Silbermonumente des K. K. Münz- und Antikenkabinetts zu Wien*, Tafel S. III und III<sub>a</sub> abgebildet). Eine Zusammenstellung und Vergleichung der ornamentalen und figürlichen Motive des Reliefschmucks dieser Henkel würde nicht nur den Beweis liefern, dass ihnen ein bestimmtes, wenig variirtes System der Dekoration zu Grunde liegt, sondern auch erkennen lassen, dass die Motive selbst und die Auffassung des Reliefs sich mehrfach mit denen des hellenistischen "Reliefbildes" berühren, als dessen Heimath mit grosser Wahrscheinlichkeit Alexandrien angenommen werden darf.<sup>4</sup>

Der Augenschein lehrt wenigstens soviel, dass der Besitzer des turiner Formsteins vorzugsweise und auch derjenige des Exemplars der Sammlung Raiffé mit der Anfertigung solcher Gefässe beschäftigt waren. Ob wir das Recht haben, diese Henkelform geradezu alexandrinisch zu nennen, lasse ich unentschieden. Aeltere vor die hellenistische Zeit zurückreichende Vorbilder finden sich in der phönizischen Kunst (Perrot, *Hist. de l'Art* III, fig. 555, 556) und von ihnen könnten die griechischen Toreuten im Ptolemaierreiche direkte Anregung empfangen haben. Jedenfalls würde es nicht auffällig sein, wenn in Alexandrien, wo die griechische Kunst aufs neue die Einflüsse des Orients in sich aufnimmt und so viele Typen der assyrisch-phönizischen und ägyptischen Kunst in hellenischem Geiste umgebildet werden, auch die Henkelmotive des Turiner Formsteins entstanden wären.

## II.

Während eines kurzen Aufenthalts in Bologna im Sommer 1886 fiel mir im *Museo civico* daselbst das Fragment eines Reliefs in die Augen, welches unter den wenigen griechischen Sculpturen dieser Sammlung sich durch eine seltene Feinheit der Ausführung auszeichnet. Dieses auf Tafel XXXII abgebildete Fragment hat etwa 25 cm. Breite und ist aus griechischem Marmor gearbeitet. Erhalten ist nur

<sup>4</sup> In der oben citirten Abhandlung habe ich nachgewiesen, dass das hellenistische Reliefbild im Zusammenhang mit der Wandverkleidung (Inkrustation) der Wand entsteht und dass letztere in Alexandrien hauptsächlich ihre Entwicklung findet.

Kopf und Hals eines nach links gewendeten Widders, welcher unterwärts von der Hand einer verloren gegangenen Figur gehalten wird, sowie vor dem Kopf der Rest einer wollenen, mehrfach mit Knoten versehenen Binde. Die Konturen des Bruches sind in der Abbildung leicht zu verfolgen. Am unteren und rechten Rande des Reliefs ist auf der photographischen Reproduktion noch ein Theil der Wandfläche wiedergegeben, in welche das Fragment gegenwärtig eingesetzt ist. In der unteren rechten Ecke ist eine aufgeklebte Marke sichtbar, welche angiebt, dass das Relief sich ursprünglich in der Sammlung der Universität von Bologna befand. Weitere Notizen über die Herkunft desselben sind mir nicht bekannt. Weder Conze (*Archäol. Zeit.* 1867 p. 89\*) noch Wieseler (*Göttinger gelehrte Nachrichten* 1874 p. 578 ff.), noch Heydemann (*Mittheilungen aus den Antikensammlungen in Ober- und Mittelitalien.* 3. *Hallisches Winkelmannsprogramm* p. 51 ff.) scheinen es gesehen zu haben. In den *Cataloghi del Museo civico di Bologna* (Bol. 1871) ist es nicht mit aufgeführt.

Augenscheinlich bildete das Fragment den mittleren Theil einer grösseren in wenigen Figuren abgeschlossenen oder auch friesartig ausgedehnten Darstellung. Auf der linken Seite befand sich etwa ein mit Binden geschmückter Altar, an welchen von rechts her ein Mann das Opferthier heranzuführte. Von diesem Opferdiener sind nur die Finger der rechten Hand sichtbar, während der Unterarm von dem Hals des Widders verdeckt wird.<sup>5</sup> Denken wir uns die männliche Figur in gehöriger Grösse ergänzt und einen Altar hinzugefügt, so gewinnt das Relief eine Höhe von mindestens 35 cm. und eine Breite von nicht unter 50 cm. Die letztere kann aber beträchtlich grösser gewesen sein, wenn wir annehmen, dass das Fragment zu einem Fries gehörte und etwa aus der Darstellung eines Festzuges übrig geblieben ist.

Der eigenthümliche Reiz dieser sicher originalgriechischen Schöpfung laesst sich eher nachempfinden, als mit Worten beschreiben.

<sup>5</sup> Ich will nicht verhehlen, dass mir auch der Gedanke gekommen ist, die beiden oberhalb des Halses und Hornes des Widders aufwärts gehenden, sorgfältig eingeritzten Linien könnten die Konturen des zur Hand gehörigen Armes sein. Ich kenne zwar kein anderes Beispiel einer soweit gehenden Verbindung einfacher Zeichnung mit dem Relief. Doch laesst sich an den sogenannten Reliefbildern, einer Klasse malerisch behandelter, mit landschaftlichem Hintergrund versehener Reliefs, deren Publikation in einem besonderen Werk ich vorbereite, häufig genug beobachten, dass einzelne Theile des Beiwerks sich im Grunde des Reliefs verlieren und dann nur durch eingeritzte Umrisslinien verdeutlicht werden.

Die Modellirung erhebt sich nur wenig (bis zu zwei cm.) über den Reliefgrund und weiss doch durch einige kräftig hervorgehobene Schatten eine starke malerische Wirkung zu erreichen. Ein hochentwickelter Realismus verräth sich in der Art und Weise, wie der Künstler die Textur des Hornes, das flockige Vlies und die Einzellockchen vor den Ohren des Widders mit wenigen Strichen mehr skizzenhaft, aber sicher andeutet. Erst in der hellenistischen Epoche, seit dem Ende des vierten Jahrhunderts gelangt die griechische Bildhauerei zu einer auf schärfster Beobachtung beruhenden Naturwahrheit in der Wiedergabe der Einzelformen und namentlich der Oberfläche des menschlichen und thierischen Körpers. Etwa dieser Zeit, dem Ende des vierten oder dem Anfang des dritten Jahrhunderts, möchte ich das Fragment in Bologna zuschreiben. Ich kenne wenige Sculpturen, die sich diesem Relief in der Feinheit der Zeichnung und in der Zartheit der Modellirung vergleichen lassen. Einigermassen ähnlich scheint mir in stilistischer Hinsicht ein malerisches Relief der Villa Albani in Rom. Es stellt eine ländliche Opferscene dar, vor dem Altar steht eine ältere Frau, zwei andere begleiten die religiöse Handlung mit den Tönen einer Doppelflöte und eines Tamburins.<sup>6</sup>

Auch ein Relief der sala della croce greca des Vatikanischen Museums (Herakles zum Schmauss gelagert) könnte zur Vergleichung herangezogen werden. Aber die stilistische Übereinstimmung ist nicht gross genug, um irgend welche Schlüsse darauf zu bauen. Über die Entwicklung der Plastik der hellenistischen Epoche sind wir bekanntlich nicht einmal innerhalb der attischen Kunst, welche uns doch die grosse, continuirliche Reihe der Grabstelen hinterlassen hat, genauer unterrichtet. Dass sich die verschiedensten Richtungen nebeneinander behaupten, und zwar Richtungen von einem ausgeprägten, individuellen Charakter, darüber kann schon jetzt kein Zweifel herrschen. Eine bestimmte Scheidung stilistischer, örtlich zu begrenzender Gruppen, namentlich im spätgriechischen Relief, wird jedoch erst möglich sein, wenn die Sammlung und Publikation der Denkmäler in derselben Weise, wie sie jetzt für das attische Grab- und das römische Sarkophagrelief begonnen worden ist, vollständig durchgeführt sein wird.

TH. SCHREIBER.

*Rom, Oktober 1887.*

<sup>6</sup> Das Relief ist ungenügend abgebildet bei ZOEGA, *Bassir.* tav. 105.

## THE "OLD FORT" EARTHWORKS OF GREENUP COUNTY, KENTUCKY.

[PLATE XXXIII.]

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I.—INTRODUCTION. On the southern side of the Ohio River, in Greenup County, Kentucky, at a point about a mile and a half below Portsmouth, Ohio, and nearly opposite the old mouth of the Scioto River, there is a very interesting series of ancient earthworks, worthy of more attention than it has received of late years. The position was well chosen, for from the top of the highest walls or embankments a fine view could be had of the Scioto valley for several miles, and also for a few miles each way of the Ohio valley, were it not for the timber along the latter on the margin of the river. The main work, a large quadrangular enclosure, is locally known as the "Old Fort." This enclosure, together with its so-called covered ways or parallel walls, was described and mapped two-thirds of a century ago by Caleb Atwater of Circleville, Ohio.<sup>1</sup> In 1846 these earthworks were re-surveyed by E. G. Squier and D. Morton, who discovered mounds and embankments not noted by their predecessor: a full account of them, with maps, will be found in the well-known work of Squier and Davis, *The Ancient Monuments of the Mississippi Valley*.

During the winter of 1885-6, I re-surveyed these imposing remains of antiquity. After a careful inspection of the ground beyond the ravine, at the end of the southwestern covered way, I became satisfied that there were earthworks, belonging to the series, not shown even in Squier's survey. This fact has induced me to prepare the present paper, and to accompany it with a diagram or outline-map of this "Old Fort" and its entire accessories, thinking that they may interest students of North American antiquities (see PLATE XXXIII).

II.—THE MAIN WORK, OR GRAND SQUARE. The main work, central enclosure, or Grand Square as it deserves to be called, is situated on a terrace some forty feet above the river bottom, the distance to the river

<sup>1</sup> His account appeared in the first volume of the *Transactions of the American Antiquarian Society*, published in 1820.

itself being about a quarter of a mile. In shape, it is a quadrangle with rounded corners, but instead of its sides agreeing with the cardinal points, as was first reported, it is rather the corners which look toward them. The inside area, though not level, is practically even—as even as ploughed land can be expected to be—and was probably shaped off to a reasonably perfect plane in the first place, for the convenience of the people using it: the inequalities of the ground having thus been removed the sky-line of the surrounding embankments is practically parallel with it. The top of each section of the wall, therefore, forms a straight line, excepting that portion of the N. W. wall which gradually rises from near the western gate to a point near the centre, and a slight depression in the S. W. wall near the south corner. While the N. W. and N. E. walls are, generally speaking, horizontal, the wall from the east corner and that from the west gate rise evenly to the south, where is the summit of the entire earthworks. The lowest part of the walls is at the western opening. The walls are not rounded at the top but there is a level space or walk of about eight feet in width, which can be readily traced along almost the entire length of the six embankments which constitute them.

These embankments, treated as four walls, are, in respect to their width at the base and vertical height, in mean dimensions, as follows: The N. E. wall is 60 to 65 feet wide, and 10 feet high. The S. E. wall has the same width and is 10 to 12 feet high, with the exception of a place near the southern corner, where it crosses the end of a spur of the slope of a higher plateau, which at that point overlooks the interior of the enclosure—most of that part of the slope which projected beyond the inside line of the wall was graded away and the material used in levelling the square. The S.W. wall ranges from 62 feet in width and 10 feet in height, at the south end, to 45 feet in width and 8 feet in height, at the west end. The N.W. wall is from 45 to 60 feet in width and from 8 to 10 feet in height.

There are six openings or entrances to this enclosure, the narrowest (the northern one) being 13 feet, and the widest (the N. E. one) 27½ feet wide. The northern and southeastern entrances are not on a level with the natural surface, but are raised some two feet higher. Neither inside nor outside ditch entered into the plan of the builders here, for there are none, the walls being, generally speaking, equally elevated above the inside area and the outside natural surface, except at the narrow point described.

The larger dimensions of this Grand Square can now be given. From the centre of the S. E. to that of the N. W. opening a straight line, measured on the plan, gives a distance of 832 feet, and, between the other two openings, of 822 feet, making a mean diameter of 827 feet. The perimeter, or a continuous line traced entirely along the centre of the walls and across the openings, has a length of about 3,175 feet. The land contained within the inner lines of the embankments, but omitting any portion of the entry-ways, is about 13.20 acres in area.

Doubtless, when its architects first drew its lines on the ground, as they necessarily must have done, proper rectangles were formed, for it is even now, practically, an "exact square," as Mr. Squier called it. The following geometrical facts, deduced from plotted diagrams, will demonstrate this statement. The first diametrical line mentioned bears N.  $47\frac{1}{4}^{\circ}$  W. (magnetic); the second one N.  $42^{\circ}$  E.—the two lines intersecting within three-quarters of a degree of exact right angles. The latter line intersects the first precisely at its (own) middle point, but about three feet N. W. of the middle of the former, or N. E. and S. E. dimension: were it, however, to run at right angles with it, it would cross about as far to the S. E., its termination striking within two feet of the right hand side of the N. E. opening, instead of half-way across it.

Considering the thousand years, approximately speaking, that have probably elapsed since these high embankments were raised, would it be rash to suggest that the builders of the same, of whatever tribe or race they were, had definite ideas of castramentation? Indeed, if we could see and test their original lines and should find them to be actually a degree or two out in angle, and ten or twelve feet in distance, for so large a square, we should have found blunders that could easily be paralleled in the work of more modern surveyors.

III.—THE NORTH-EASTERN COVERED WAY. The northeastern covered way extends a little over 2,000 feet from the wall of the enclosure, and its constituent embankments vary in width from 20 to 32 feet at the base, and in height from  $1\frac{1}{2}$  to  $3\frac{1}{2}$  feet—the narrowest parts being those on each side of the northern opening. Although, for convenience sake, occasionally called "parallel walls," here and elsewhere, like the southwestern ones, which are, for the most part, truly parallel, the walls of this covered way, at no place present any parallelism: the least distance between them, from top to top, is 176, and the greatest 320 feet. The walls intersect two ravines, both of which were undoubtedly in existence when they were built, for the embankments

follow the slopes nearly to the bottom. The ends of the walls, at both crossings, show that they have been cut away by water coming from the adjoining high land.

The length of the N. W. wall, following along its central portion, is 2,135 feet, and that of the S. W. wall 2,320 feet. The northern opening or gateway is 15 feet wide, and the distance between the embankments at the southern end is 80 feet. The included area, as bounded by the lines forming the inside bases of the walls, continued across all the openings, as in the case of the Grand Square, is 8.80 acres.

IV.—THE SOUTH-WESTERN COVERED WAY. The walls of the S. W. covered way run strictly parallel for nearly 1,100 feet, and are 191 feet apart (on centres) for that distance: the S. E. wall then makes a very slight angle to the left, or southward, but the other continues its course unchanged to the end. They are 35 feet wide at the base and from  $2\frac{1}{2}$  to  $3\frac{1}{2}$  feet in height. The length of the N. W. wall, both ends of which are finished, or rounded off, is 1,510 feet, and the farther end rests on the edge of the ravine, which is some 40 feet in depth and 500 feet wide, and has very steep sides. The end of the other wall has been destroyed by the falling away of the bank, leaving its present length exactly 1,190. The area, bounded by the lines forming the inside base of the walls and lines drawn between their extremities, is 4.90 acres.

V.—Before describing the outlying earthworks, the extent and dimensions of the entire "fort" with its covered ways should be ascertained. From its extreme limits on the N. E. to the end of the finished embankment on the S. W. the distance is 4,500 feet in an air line, or .85 of a mile. The entire length of all the embankments, or walls, as built, omitting original openings or vacant spaces, is a few feet over 10,200 feet, or 1.93 miles. The land included within the square, and covered by the parallel walls, together equals 26.90 acres. A fair computation of the area covered by the bases of all these walls, and of the cubical contents of the embankments raised on them—including the "traces" and the spur crossed—according to the data furnished by this survey, gives as follows:

For the grand square,	. . . .	4 acres,	29,400 cubic yards.
" northeastern parallel walls,	3 "	6,700 "	" "
" southwestern " "	2 "	5,900 "	" "

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Total, . . . . . 9 acres, 42,000 cubic yards.

VI.—OUTLYING WORKS OF THE GRAND SQUARE. Just west of and near to the northern corner of the large enclosure, there are two small burial-mounds, one of which is 42 feet in diameter and  $2\frac{1}{2}$  feet in height, and the other 45 feet in diameter and 3 feet in height.

Also about 650 feet to the northward of the northern entrance of the square, and on the edge of the same plateau on which the main work is built, there is a small elliptical enclosure. The oblong mound within it is 60 by 128 feet at the base and 4 feet high. The embankment ranges from 30 to 80 feet in width and from 1 to 5 feet in height. The ditch, which is between the mound and the embankment, leaving no berme, has an average depth of 15 inches, and is twenty-four feet wide. At the east end of the enclosure there is a narrow causeway, 6 feet wide, which crosses the ditch.

VII.—WORKS BEYOND THE S. W. RAVINE. We now turn again to the S. W., and, crossing the ravine beyond the covered way, there find other earthworks which are different in shape and arrangement from those just described, and some of which are the works referred to in the beginning of this paper as not having been noted by previous explorers.

First, there is part of a circular enclosure, apparently 230 feet in diameter.<sup>2</sup> This would imply a circumference of 723 feet, were the enclosure complete, but, unfortunately, only about one-third of it remains. This fragment is 35 feet in width and 4 feet in height, with a gateway or opening of 8 feet on the S. W. side. At a point less than 40 feet after passing through the entrance, one comes to the snout of an animal-shaped mound, which, fortunately, has not been touched by the encroaching ravine immediately back of it. This "effigy" probably represents a bear, which seems to be leaning forward in an attitude of observation. It is not very large, being but 53 feet from the top of the back to the end of the fore-leg, and its utmost length is  $105\frac{1}{2}$  feet from the tip of the nose to the rear of the hind-foot. The greatest vertical height is at the fore-shoulder, where it is  $3\frac{1}{2}$  feet.

East of and near the entrance to the ruined enclosure just described, there is a low embankment, 32 feet wide and  $1\frac{1}{2}$  feet high, which runs 348 feet in a nearly S. W. direction.

To the east of the southern end of this last embankment lies a small enclosure. The wall is 15 feet wide, 1 foot high, and 92 feet from

<sup>2</sup>The three fixed survey points on the centre of the bank or wall form points on an arc of a circle having a radius of 115 feet.

centre to centre of embankment, but there is no opening in it. Within is a small mound 32 feet in diameter and 2 feet high. This enclosure is probably the small two-feet-high circle mentioned by Mr. Squier.

Nearly south from the animal-mound enclosure there is another circle, 130 feet in diameter from centre to centre of the embankment, which is 32 ft. wide and  $1\frac{1}{2}$  ft. high. On the inside there is a ditch 21 ft. wide and 1 ft. deep. The opening in the wall, which is to the eastward, and the causeway over the ditch are both 22 ft. wide. This enclosure, like the preceding one, has a mound inside, but it is situated back of the centre from the opening, and is 35 ft. in diameter and 1 ft. high.

Beyond these enclosures, to the S. W., are a number of ordinary burial-mounds, and traces of some straight embankments that have been cultivated for many years, which I did not survey by reason of bad weather. They undoubtedly belong to this series of works. There are also some stone-mounds, on the spurs of the adjacent bluffs, to the south and southwest.

The above facts were taken from the field-book of a sufficiently close survey, in which 86 bearings were taken and horizontal distances measured, aggregate in all 10,485 feet, or nearly two miles (without including the nearly as many diameters and the offsets for topography), and in which, also, levels for vertical dimensions were taken at 80 separate points.

The site, though by no means as the mound-builders left it, is almost perfect when compared with the remains at Newark, Ohio, and other places. The surface inside the main enclosure and a portion of the N. W. wall, together with both covered ways and the other enclosures and mounds, have either been cultivated or are under cultivation—the first-mentioned, for many years. The S. W. wall is still covered with large trees. Up to the time of the partial destruction of the N. W. wall last year, the embankments of the "fort" had scarcely been disturbed, and were in good condition, their height having been their greatest protection. While the covered ways may have been somewhat higher, they never had the height represented by earlier explorers, for in places the wall has, apparently, never been disturbed, and at such points the height does not exceed  $3\frac{1}{2}$  feet: nor do I think that the two isolated mounds were ever as high as six feet each. Under these circumstances, then, it was possible for a judicious surveyor to make a reasonably accurate survey of the "Old Fort" and its surroundings, at this late date, without drawing on his fancy.

Since I made this survey, the Maysville and Big Sandy railroad has been graded between these earthworks and the river, but so close to the former that the N.W. wall is badly injured in its entire length.

Within and around these earthworks, on all the plateaus, in every direction, there are abundant evidences of a former occupancy, especially on the N. and N.W. sides, where the village *débris* is the most abundant. This consists of broken pottery, stone and chipped implements, broken sea and fresh-water shells, disks, ornaments, and, in fact, nearly everything that is usually found on ancient village sites. Near the southern corner of the "fort" itself will be noticed, on the plan, a limited elevation or ridge. Mr. Atwater describes this as "a large elevated mound," and thinks it "to have been designed for uses similar to the elevated squares at Marietta;" but in his description of the Marietta works he does not state what those uses were. Mr. Squier also refers to it, but not so positively: he calls it "a bastion, probably natural, but adapted by art, which commands the hollow way or ditch" on the southeastern side, which "ditch" seemed to him also artificial, or, "at any rate it has been modified by art." There is, however, no doubt that this point is wholly natural, for it is simply a spur of a higher terrace, only modified by the building of the wall across it, and by the grading off of its end where it projected inside the latter. Nor is the ditch anything more than the depression where the natural slope and the artificially placed earth come together.

There is no other statement in Mr. Atwater's account tending to mislead or puzzle the modern investigator, but Squier found "on the S.W. side a sort of run-way resembling a ditch, which loses itself in a deep gully towards the river. It is undoubtedly wholly or in part artificial." Now this "ditch," deepening into a ravine as it extends northwestward, is no more artificial than the other: it is undoubtedly natural, though it afforded a good passage-way to and from the bottoms below.

Mr. Squier also states that "a light wall of some hundred paces in extent runs from the left hand entrance of the main work along the verge of a declivity terminating at the western angle," and he delineates it on his map. There is no artificial wall such as he describes, nor even any natural bank other than the edge of the ravine and terrace. Of the three mounds he describes I could find but two.

It is almost impossible to tell why these elaborate earthworks were erected. In a few matters the explanation is obvious, but in the majority of points every reason advanced would be mere hypothesis. Let us take the main enclosure for example. By placing palisades on the wall

near the south angle, where it intersects the spur, and closing the openings, it would certainly serve as a fort, and could be defended against any weapon that may have been in use at the time the works were built. The absence of ditches or trenches in connection with the fort and its parallel walls may, in some eyes, militate against the theory that the works were erected with a view to warlike operations, but that is not conclusive as regards the old mound-builders, for we are totally ignorant of their method of waging war.

The unattached smaller enclosures were probably for burial purposes, the mounds in the two circular ones being of the same form as ordinary tumuli. In several instances where such mounds have been opened, they have been found to contain human bones. Sometimes these were calcined, and in such cases ornaments, pipes, *etc.* were found with them.

The "bear" effigy-mound described here has never been mentioned in print before, and seems to have hitherto escaped the notice of enquiring scientists—indeed, it was unknown even to the residents of the neighborhood. Its value is, mainly, in that it is the first imitative mound constructed of earth discovered south of the Ohio River, and that it is an important addition to the scanty list of such works already brought to light in Ohio, the nearest of which is but a few miles away from this one, being the peculiar three-legged animal (in profile) on the Scioto River, just above Portsmouth, surveyed by Col. Whittlesey in 1846 and mapped in the *Ancient Monuments*.

Though not brought to public notice, to my knowledge, prior to 1791,<sup>3</sup> this "old fort" was probably known to white men nearly a century earlier. The walls of its central enclosure have yielded, from the time of the earliest American settlements to last year's railroad-grading, all sorts of relics of European origin. Gun-barrels, buckles, crosses, coins, *etc.*, taken thence have found their way into the hands of the curious.

T. H. LEWIS.

St. Paul, Minn.,  
Sept. 30, 1887.

<sup>3</sup> By Major Jonathan Heart, stationed at Fort Harmar, who, in a letter to Dr. B. S. Barton, of Philadelphia, dated January 5, 1791, speaks of such ancient remains as being found "along the Scioto to its junction with the Ohio, opposite which, on the Virginia side, are extensive works, which have been accurately traced by Colonel George Morgan; and I have been told that there are remains of chimnies, &c." See Vol. 3 of the *Trans. of the Amer. Philosophical Society*.

## NOTES.

## ASSYRO-BABYLONIAN FORGERY.

For the sake of warning possible purchasers, let me add another to the catalogue of Babylonian forgeries described by M. Ménant in the last number of the *American Journal of Archaeology*.

I received three days ago, from a learned correspondent in Constantinople, photographs of a table, or "altar," said to be in "copper bronze," and "patinated so as to leave little room for doubt of its antiquity." Its top is like a box three inches long by nearly two and a half inches wide, and an inch thick. It is supported on four straight legs fashioned like those of an ox. From each end of the two sides there stand out the neck and head of an ox with short curved horns, projecting an inch from the side. The top and at least one of the two ends are adorned with groups of figures in low relief surprisingly like those on some cylinders.

A careful examination reveals the forgery. The figures are evidently taken not directly from cylinders, but from casts of cylinders, the originals not being at the command of the forger. Of the two designs on the top of the "altar," the upper represents Gisdubar holding up in each hand a griffin by the hind leg. Above and about the group is an inscription in cuneiform characters, at the right and left edge is an ornamental design: on being closely inspected this design is that of *one half* of the Assyrian sacred tree. It is evident that the forger had in his possession a cast from the seal which had been carefully made so as to duplicate nothing, and to represent the deity and the griffins in the middle. This required the splitting of the sacred tree vertically through the middle leaving its two halves at the two ends of the cast. It is inconceivable that an Assyrian artist could have so mutilated this tree. The original design may be attributed to the period of Sargon, when these peculiar eagle-headed griffins were much affected. Below this group is another, also evidently taken from a plaster cast. But this time the design is not of an Assyrian type, but Babylonian, and decidedly archaic, belonging to a period not less than a thousand years an-

terior to that of the Assyrian group. The combination of the two is impossible in a genuine antique.

As it occurred to me that I was familiar with the cylinder from which the Assyrian group was taken, I examined the casts in my possession, and soon convinced myself that I could fully identify the cylinder. It is a beautiful red chalcedonic quartz, belonging to the Rev. Henry Fairbanks, of St. Johnsbury, Vt. Not only is the group the same (not otherwise known), but the inscription also has been copied, so that we find on the left the words *Kunuk Zabri*, "Cylinder of Zabri," and, on the right his filiation, *Mar Papari*, "Son of Papari." The forger happens to have duplicated the character *pa*, so as to read *Papari*, in place of *Pari*, as it is on the original cylinder. We thus have this object which, whatever it is designed to represent, table or altar, is certainly *not* a cylinder-seal, designated by its inscription as such a seal. The inscription itself proves the forgery. By a remarkable coincidence, the second of the groups, also, is taken from a cylinder belonging to Mr. Fairbanks. It is not so well copied as the Assyrian one, although that leaves much to be desired. The proportions are not very well kept in either case, and the inscription of the upper group, beside doubling the *pa*, shows other marks of ignorance. Two curious blunders appear in the second, or Babylonian group. Heabani loses his bull-like body, and becomes quite human; and the indistinct inscription between the divine bull and Heabani has become transformed into an absurd short man with a high double pointed mitre. On the end is another group, equally taken from the impression of a cylinder. From the imperfect photograph it is impossible to describe it further than by saying that it is old-Babylonian, of an antiquity much beyond that of the first Assyrian group.

As this very peculiar forgery would be likely to deceive any but an expert, and as it is likely to be the forerunner of other objects from the same skilful workshop, it is well to put the purchasing public on guard against this new and taking fraud.

WILLIAM HAYES WARD.

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## THE SUN-GOD ON BABYLONIAN CYLINDERS.

Allow me to add one or two points to my paper on "The Rising Sun on Babylonian Cylinders" published in the last number of this Journal. In answer to my question, Mr. T. G. Pinches writes me that the star-headed object to the right of the god in PL. V-VI, *fig. 1* may designate the god Shamash, the star being the common character for *god*, and the lozenge for the Sun. Now, this same object appears also on *figures 5 and 10*; and as these three cases are the only ones, with a single exception (Ménant, *Les Pierres Gravées*, t. I, *fig. 23*), among the hundreds of published seals on which I have been able to find this character, I think it may be taken as a further indication that I am right in identifying with Shamash the god whom it accompanies.

Two texts are quoted in Sayce's *Hibbert Lectures* (pp. 180, 469) which connect the sunrise and sunset with mountains. One of these is a hymn to the Fire-god:

"O Fire-god, how were these seven begotten, how were they nurtured?  
These seven in the mountain of the sunset were born;  
These seven in the mountain of the sunrise grew up.  
In the hollows of the earth they have their dwelling;  
On the high places of the earth their names are proclaimed.  
As for them, in heaven and earth they have no dwelling, hidden is their name.

Among the sentient gods they are not known.

Their name in heaven and earth exists not. •

Those seven from the mountain of the sunset gallop forth;

Those seven in the mountain of the sunrise are bound to rest."

Professor Sayce also refers (p. 363) to the same hymn to the sun from which, in a note appended to my article, Dr. Jastrow quoted the lines apostrophizing the sun as rising from "the Mighty Mountain," the place of destinies. The "Mountain of Sunrise" and the "Mountain of Sunset" Sayce regards as the same mythical under-world mountain. I should question this, and should compare another hymn in honor of Adar (*ib.* p. 485):

"O Adar, the lord, the son of Bel, what can rival thee?

From the mountains of Elam may it be fetched.

From the mountains of Magan may it be brought down."

In this passage the extreme eastern mountains of Elam, and the extreme western mountains of Magan (the Sinaitic peninsula), were challenged to bring the equal of Adar. These are likely to be the mountains of the rising and the setting sun.

Another interesting passage tells us that the god Anu, head of the chief trinity of gods, was the maker of the gates through which the sun passes

at his rising and setting (*ib.* p. 389). The hymn describes Anu as fixing the stars and constellations of the zodiac. He made it, we are first told, "a mansion" for the Sun-god. The hymn then proceeds:

"He established the mansion of Bel and Hea along with himself.

He opened also the great gates on either side.

The bolts he strengthened on the left hand and on the right."

We thus have abundant literary evidence for both the mountains and the gates of sunrise and sunset depicted on the family of seals under discussion.

In this Journal for 1886 (vol. II, pp. 261-66), I described several cylinders which represent a god of agriculture. I did not then attempt to identify this deity with any one of the Babylonian pantheon. But the god who seems to have presided over the fruit of the field is the one called Serakh, or, in the later Assyrian, Nirha. For mention of this god see texts translated by Lenormant ("Chaldean Magic," pp. 45, 69, 120, 171) and by Sayce (*Hibbert Lectures*, pp. 308, 384, 519).

WILLIAM HAYES WARD.

## CORRESPONDENCE.

### LETTER FROM ROMA.

Among the notable archaeological events at Roma, of recent date, are the changes in the German archaeological Institute and the project for an Italian Institute; the proposed new law to regulate excavations over the entire kingdom of Italy; the exhibition of Textiles; the establishment of several archaeological professorships at the University. Much regret has been felt at the autocratic step by which the great German archaeological Institute in Roma was made a mere dependency of Berlin. Ever since its establishment, more than half a century ago, the Institute has been considered by Italians as in great part a national growth, and their interest in it has equalled that displayed by the Germans themselves. Its leading idea was to be an international institution, and the prominent share taken by France is too well known to mention—the outward sign of a French subtitle in the publications being preserved to the end. The great majority of its members and of attendants at its meetings were Italians: its sittings were conducted and its invaluable publications (the *Monumenti*, the *Annali*, and the *Bullettino*) were issued, for the great part, in the Italian language. And this seemed eminently appropriate, for Italian archaeology was the invariable subject treated both at meetings and in publications. Unfortunately, there comes to Roma some German visitor, without sympathy with the traditions of the Institution, whose ire is roused because he is requested to speak in Italian, and who forthwith raises a hue and cry in the German press, complaining of the de-nationalization of the Institute. As the result, a hecatomb was made of *Monumenti* and *Annali*, and only the *Bullettino* remained in a changed form and with the addition of a German title and index—the inconsistency of which is made the more apparent by the fact that nine-tenths of the contents are still printed in Italian. In consequence of all this, both Secretaries of the Institute, Professors Henzen and Helbig, resigned—the resignation of the former being sent in but shortly before his death. It would seem as if the result could not fail to be disastrous. One of the effects has been the withdrawal of a large part of the Italian members and the attempt to form an Italian Institute to take the place of the German, though the scheme does not appear to have met with much success.

It is a general feeling that the laws regulating archæological investigations and excavations in Italy should be changed. Firstly, they are too restrictive and unenlightened, and, secondly, each province has preserved its antiquated laws, so that there is no uniformity throughout the land. Owing to the confusion and uncertainty reigning in this question, there are endless law-suits and violations of the laws: such an amount of red-tape officialism is required as effectually to discourage scientific work in many cases, and, notwithstanding the most benevolent of intentions, the letter of the law is made to kill the spirit. It seems unjust, for example, that archæological property to the value of over 200,000 lire, belonging to the late collector Castellani, and now the property of his widow, should be sequestrated by the Government, and that it should neither be willing to purchase it nor allow her to realize its value. It also seems unjust that a man should be so severely treated as was the lucky proprietor near Todi who recently discovered the famous tomb of a woman containing such magnificent jewelry and vases (JOURNAL, vols. II, p. 490, III, p. 189): under Todi (*News*) is published the sentence passed on him by the court because, though he had obtained a regular permit to excavate, he had not thought to renew it before its expiration. For this oversight the man was condemned to pay a fine of 1000 lire, and objects worth several times that sum were confiscated! And yet such are but a few of the difficulties in the way of discovery. I was witness at Corchiano of the petty manner in which permits for sale are doled out to discoverers and proprietors. The permit is given for carefully specified objects, and, if a piece of jewelry happens to be found in the same tomb after the enumeration has been forwarded to Rome, a further report and request has to be made, and sales are often impeded because a lot is thus divided and the permit is slow in coming—for anything official takes an unconscionably long time. Then, the laws which govern excavations in different parts of the country are antiquated, and do not suitably apply in many cases that arise from new methods of archæological research. Both the *Legge Pacca*, which rules the former States of the Church, and the Neapolitan law still in vigor for the whole of Southern Italy and Sicily, are more than a half-century old. They were intended for a different condition of things, for the days before archæological science was born and when all research was more destructive than constructive—more or less a piratical depredation on past civilizations, a digging for objects to sell. Topographical researches, attempts to determine the character of monumental ruins, were not yet in order, and these old laws did not contemplate them. In fact, the idea that such topographical researches did not come within the prohibitory clauses of the Bourbon law of 1822 was what led to the misunderstandings that have grown out of our excavations on the ruins of the great Temple of Hera Lakinia at Kroton (see JOURNAL, III, pp. 181–82;

8th Annual Report of the Archaeological Institute, the N. Y. Nation, Nos. 1138, 1139, 1140, 1142, 1144), the local opinion being that no Government-permit was necessary for scientific investigations. The result was that all the objects found in the course of these excavations, though regularly declared to the Inspector of Antiquities for the province, Marchese Lucifero, were one fine day seized, thrown into the open trenches, and covered with earth. Of course such violent action on the part of the ignorant subalterns was not approved by the Central Office, but could not be undone.

To remedy these defects, a new law on antiquities has been elaborated by Deputy Cambray-Digny and Senator Fiorelli, the General Director of Antiquities for the kingdom. This law is designed to apply to the whole of Italy and to facilitate excavations for museums and other collections—especially foreign museums. There appears to be considerable opposition to it in the Chambers, for it does not recognize the right of private individuals to excavate on their own property: this is a point on which a large number feel very strongly, for every Italian land-owner hopes that his land will some time bring forth hidden treasures.

To visit Baron Baracco's collection of ancient sculpture, at Roma, is a privilege accorded to few strangers. In giving me a letter to the Baron, Prof. Helbig remarked that, for the illustration of the historical development of Greek sculpture, this collection was more important than even the Vatican museum. It is a collection which cannot fail to excite enthusiasm, for, although small, each piece that it contains is a gem of art and in remarkable preservation; and after seeing it one feels that even in the Roma of to-day it is possible, with time, taste, money and patience, to make a fine collection of Greek marbles. The Baron seldom shows it, and has not allowed his chefs-d'œuvre to be published, proposing himself some day to issue a critical illustrated catalogue. However, it will not be indiscreet for me to simply enumerate a few of the pieces that impressed me most forcibly. Of works belonging to archaic Greek art there were several examples, among them a head in the style of the Aigina marbles and the lower part of a relief comparable to the stele of Aristion, with the addition, on the base, of a scene in low-relief. The second half of fifth century was well represented, the only works found outside of Italy being a female head in relief brought from Attika, which reminds one of the head of Peitho (Michaelis) on the east frieze of the Parthenon. There are interesting replicas of the *Doryphoros*, the *Diadoumenos* and the *Diskobolos*, beside works in the round and reliefs of less noted origin, referable to the same period. Among later works, the two pieces that most impressed me were a magnificent marble portrait-bust of Alexander the Great, and a so-called head of Demosthenes—a most wonderful study of an elderly man with deeply-marked and characteristic features; both these works appear to belong to the third century B. C.

Before this visit to Roma, I had heard much of the important series of terracottas, large and small, lately discovered (of which there were reported to be about 20,000), for the most part stowed away in the various *magazzini* of the Archaeological Commission of the city. Some large groups of reliefs from the gables of temples were reported to be of especial interest. I had the privilege of visiting quite thoroughly the various store-houses of the Commission, but my search was not rewarded by the discovery of anything of importance. A fragmentary marble group of small dimensions, which had not, so far as I could ascertain, been noticed, though discovered nearly two years ago, attracted my attention. In the centre was the lower part of a nude male figure, resting on one knee, with muscles distended: on his left were part of the limbs of a more youthful figure extended on the ground, with similar traces of a corresponding figure on the right. Snaky folds were represented entwining and imprisoning the limbs of these figures. The conclusion at once forced itself upon me that here was a miniature reproduction ( $\frac{1}{2}$  life-size) of the group of Laocoön and his sons. I regret having had no time to make a sketch of this interesting fragment, for, though its debased style showed it to belong to the late-Imperial period, its interest would lie in its being doubtless a copy of some earlier work.

Among the most interesting of the investigations lately carried on in Roma has been the dredging and digging up of the bed of the Tiber. The regular accumulation of mud and sand make it easy to locate the stratum corresponding to each different period in the history of the city; and, in sinking shafts for the piers of the new bridges, the stratum of the early-Kingly period has been reached by passing through those corresponding to the Renaissance, the Middle Ages, the Imperial and Republican periods. Expectations and hopes as to the results of this work, in the discovery of valuable works of art, were raised to the highest pitch. They have not been entirely satisfied. What is the reason? It is not far to seek, and is mainly this: the workmen do not receive the smallest reward or compensation for the antiquities they may find, so that it is not worth their while to give any extra labor to extracting them, except in the case of coins, terracottas, small bronzes or the like, which they are able to conceal and carry off for sale. I have heard from most authentic sources that, in sinking the shafts, the arms or legs of many a bronze or marble statue have been seen protruding, and are simply hacked off to avoid the trouble of digging out the entire figure. Hence, the great majority of objects rescued from the Tiber have been small, almost the only large work recovered being the bronze statue of Bacchus. Among the smaller recent finds, that of greatest importance is a series of the earliest Roman As, several of which are almost unique: unfortunately, this series has been dispersed, being sold to a number of collectors and museums. It is extremely difficult to know what

is really found: the greater proportion are never officially known or their provenience recorded. In fact, in this and in many other instances it is only by getting behind the scenes that any idea can be obtained of the importance of recent discoveries in Roma in the fields of sculpture and the minor arts.

Much has been said of the two new Museums to be opened in Roma, one in the Baths of Diocletian, the other in the Botanical Garden on the Coelian (JOURNAL, vol. I, p. 446). The former is as yet in an embryonic state, consisting merely of five small oblong chambers made in the cloisters of Santa Maria degli Angeli, each of which contains an interesting piece of sculpture belonging to the recent discoveries. The two most important pieces are the bronze statues of the seated boxer and the standing athlete; the others are a fine headless figure of Juno magnificently draped, the bronze statue of Bacchus found in the Tiber (JOURNAL, I, p. 443) and the marble statue of the youthful Ganymedes with Phrygian cap (JOURNAL, III, p. 187). Nothing has been done towards the building of the great Central Museum on the Coelian, which has been the cause of considerable tension between the City Commission and the Central Direction, on account of the unadvised action of the Syndic in promising to hand over to the Ministry all the works of art found which belonged to the city and were subject to the care of the Archæological Commission. The sum of over two millions is to be appropriated for the Museum, according to the agreement recently made, the city paying one third.

A most interesting institution is the Government artistico-industrial school at Capo-le-Case, with which a Museum of considerable value is connected, and which has greatly developed during the last two or three years. It contains a number of collections loaned or for sale, like the famous ivories of the town of Fabriano—one of the finest collections of ivory-carvings in existence: of unusual interest also is a large selection of Etruscan terracottas of both the archaic and free periods (exhibited by Sig. Jacobini of Genzano) which surpass in number and value any similar collection I have seen: some of the archaic terracotta reliefs are unique as to subject. I noticed a long narrow frieze of reliefs in semi-archaic style, and a large series of antefixæ of various dates. The study of these works is new, and might lead to results of value for the history of Etruscan art. For example, if we examine the series of antefixæ with the *apotropaion*-head identified with the Etruscan or the Greek Medusa, we find that examples of the same three or four varieties are found in widely distant localities, like Capua and Chiusi—at the two extremities of a territory within the limits of which the same types occur on other sites. The solution of the finding of these antefixæ, which seem turned out from an identical mould, at points so distant from each other would seem to be found in the hypothesis of a common centre of manufacture to which orders were sent whenever a temple was

erected. I was so fortunate as to secure in Roma the original mould of one of the two or three most-diffused of these types, which was known to have come from a temple at Capua along with quite a number of the antefixæ themselves, several of which I also purchased. This would seem to point to Capua as the centre of this manufacture. Every year shows with greater clearness how important is the part played by terracottas in the history of Italian sculpture before the Augustan age, when marble became for the first time the predominant material; some of the most striking examples have recently been found among the ruins of the two temples that have been brought to light at Falerii, which I shall refer to later.

Finally, there has been a temporary exhibition (at the new Palace of Fine Arts on the Via Nazionale) of Textiles and Tapestries (JOURNAL, II, p. 496; III, 193). Contributions were sent from all parts of Italy: churches, museums and private collections vied in zeal to make the exhibition a success. Perhaps the most remarkable of the early embroideries were the two Gothic pluvials of the early-fourteenth century belonging, one to the town of Pienza in Tuscany, the other to the basilica of S. Giovanni Laterano in Roma: they are quite similar in style, belonging to the French school, and are covered with minute compositions of great beauty. Of immense Belgian and Italian tapestries of the xv and xvi centuries there were many in excellent preservation. On a small scale, there was considerable interest, for a student of the history and technique of the art, in the collection of over eighteen hundred examples sent by the Museum of Modena, extending from the Byzantine times to the present day. In connection, I will mention that a new chapter in the history of tapestry has recently been opened by the appearance in the market of quite a series of works of the early Koptic looms, brought from Egypt to France and Austria. When in Paris, I saw a fragment with the figure of the Good Shepherd, in the style of the catacombs and the sarcophagi—a work certainly not later than the fifth century. A number of similar examples have been purchased by the Louvre and also by the Museum of Lyon. These are therefore the earliest extant examples of Christian tapestry. Purchases of such Koptic tapestries have been recently made, by the *Musée des Gobelins*, Paris (a series found in 1884 by M. Maspéro in the tombs of a Koptic cemetery: see *News*, PARIS), and by the South Kensington Museum, London (*News*, LONDON).

A. L. FROTHINGHAM, JR.

*Roma, Italia,*  
*June 20, 1887.*

## REVIEWS AND NOTICES OF BOOKS.

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LES DU CERCEAU, LEUR VIE ET LEUR ŒUVRE, d'après de nouvelles recherches, par Le Baron HENRY DE GEYMÜLLER, *etc.*: 137 gravures dans le texte, et 4 planches hors texte, pour la majeure partie inédites. 4to, pp. x-348: Paris 1887, Rouam (Bibliothèque internationale de l'Art).

There can be no doubt that M. de Geymüller has been for years collecting his materials for this book; but the immediate cause of its being finished and brought out, first in the pages of *l'Art* and then in a quarto, is the acquisition by the Royal Library of Munich of some sheets of drawings, undoubtedly the work of Jacques Androuet du Cerceau. These leaflets, fourteen in number, contain sixty-one different sketches, all of Italian subjects. It would be difficult to disagree with M. de Geymüller in his opinion that all these were drawn in Italy and early in Androuet's life, before 1534. The indications that they were leaves of Androuet's travelling sketch-book, or, at least, the sheets of paper on which he drew out, at night, the day's notes and memoranda, is very strong. No less than eleven of the sketches are made from models, plans, *etc.*, for the great church of St. Peter. These belong to a time when the whole design of that church was in question: when both Bramante and Raphael were dead, and the elaborateness and costly nature of the design made by the latter had caused a suspension of the work and a reconsideration: to the time just preceding the new and vigorous impulse given to the work by Paul III. It appears to be admitted that Androuet's visit to Italy came to an end just before the accession of Paul III, in 1534. M. de Geymüller published, some years ago, a large and important book on the different experimental plans for St. Peter's church. That work finds in chapters I and II of the present one a most important appendix.

Other sketches of the Munich collection give what are claimed to be plans of that palace which once stood where the *Piazza di San Pietro* now is, and was called Raphael's house—the house where Bramante as well as Raphael lived and died; plans of the Palazzo Farnese, too; and, more important still, a series of twenty-nine drawings of the *Cancelleria*, loveliest of Roman civil buildings, and second to no edifice of equal size and cost of all the creations of the Italian Renaissance.

The *first and second chapters* of the book before us are devoted to the above-named drawings; and it is to be regretted that it was not feasible to reproduce more of them. Perhaps this was not permitted: perhaps we have that publication to look for, coming from Munich itself. The *third chapter* deals with the influence of Italy upon Androuet: and here it must be urged that it was not Italy, nor the buildings of Italy, that our studious architect sought and found: but the theories and the attempted practice of a small body of Italians. The burden which the fine-art of architecture has to bear is in no place so visible as in the works of the men of the Renaissance. There are their designs by thousands in the collections of drawings, and by hundreds in volumes and portfolios of prints from engraved plates; there are, to compare with these, the few completed buildings; and from this whole body of enthusiastic and patient work we learn that the noble art of building must always in this world be a vision more than an actuality: one dreams of splendid things—one realizes small and slight things. If, by chance, a single fine dream takes form, if an ideally perfect château rises from the earth, these results follow: the owner is ruined, his family are burdened with debt, the building, not quite finished, passes into other hands, is disfigured, and soon torn down to patch the humbler buildings of the neighborhood or, at best, becomes a barrack, a convent, or, later, a museum. If by chance a church is started on a grandiose scale, it remains unfinished. No man's eye has ever seen a great cathedral complete: in view of this, even the cast-iron uniformity, the dull, modern square-and-compass work of Cologne can be forgiven, for at Cologne at least the spires rise into the rain-clouds, the bells thunder from the belfries, the mass of roofs and towers dominates the city when seen from a few miles off, and we are helped to an understanding of what a mediæval master-builder meant by a church. It is perhaps fortunate that the architecture of the original building, the choir of the fourteenth century and the base of the west tower, is not finer; for no great loss is suffered by the "restoration" of it into perfect harmony with the modern work, and, moreover, it is perfectly within reach of the modern architects to match it by following and piecing out the design which the old tower had left for their guidance. So that, on the whole, we have to be thankful for the modern cathedral. One is helped to conceive what a great cathedral would be, were it ever finished, by taking from Cologne a memory of its mass, its variety, its lofty look as if nothing could ever be higher—its completeness, in a word—and investing with these the loveliness of Chartres or the solemn and noble monotony of Bourges. And so we are brought back to the restatement of the point, that noble architecture must always be a dream, a memory and an aspiration, far more than an actuality.

But in 1534 the world of artists was not convinced of that; and small

blame to them! energetic and full of sense of power as they were! Carpaccio's Saint Ursula pictures at Venice have their ideal architecture, designed for the occasion as freely as the strange, half-oriental costume which invests his figures; but even his arcaded porches are not more fantastically picturesque than the designs which grave men made in the fifteenth and sixteenth centuries for their princely employers, and hoped to be allowed to carry out. The great Cagliari knew what ideal grandeur was, in long perspectives of colonnades, as we can see in vast canvasses which are to some of us the finest pictures on this earth: but even he could not out-dream our friend Androuet and his compeers. And what Androuet sought in Italy was, not the external aspect of cities or existing buildings, but the dreams and hopes of the few Italians who were busy idealizing architecture, and whom the disappointments of eighty years had not discouraged. The Renaissance was already an old story in Italy: its earlier epoch was passed, it was in the hands of the pupils of the pupils of Brunellesco and Alberti: but to a Frenchman it was new, as yet, in 1530. To a Frenchman, Gothic art had hardly said its last word: many churches, like St. Maclou at Rouen in style, many city-residences, like the Hôtel de la Tremouille and the still well-known Hôtel de Cluny, at Paris, many country-*châteaux*, like the famous Louis XII wing at Blois, were still new buildings, built during the preceding reign. The Classical Renaissance had shown itself, indeed, but as yet so rarely that it was still in the air, as a branch or offshoot of the new-found classical learning, rather than a controlling style of building. Androuet, more perhaps than any other Frenchman, had charged himself with the task of bringing this Italian conception of architecture, this supposed antique Roman way of building, across the Alps, as the real Roman way had come on a former occasion. And when in Italy he studies, it seems, not the buildings of the men of the first Renaissance, the masters of the *Cinquecento*, but the very latest style, wherever he can find it. He is young, he dreams of a perfect style which will answer all requirements; the days when he will engrave a thirteenth-century *château-fort* as one of a small selection of the Best Buildings of France, and do it faithfully, are yet far off: now, even when he makes a drawing of an existing building, he alters it to his taste: it is not the building he cares for, but the impression made upon his mind of what might be built, say in France. It is quite like Turner painting Lausanne, and putting in towers and grouping the actual towers that the whole may "compose" to suit him. And it is the natural impulse of the man who, indeed, is to be critical and interested hereafter in the comparison of monuments of art as not one of his contemporaries will be, but who is as yet in his youth and thinking of a propaganda, of a true revelation which he must preach to his countrymen.

But to return to M. de Geymüller's book: in *chapters IV* and *V*, he ex-

amines the manner of Du Cerceau as draughtsman and engraver; and he seems to make a worthy use of the great amount of material which has been at his disposal, in France and elsewhere, his especial object being the identification of the master's work at different periods of his life. In *chapter vi* comes up the old question, often answered with *yes* and sometimes negatively, was Jacques Androuet du Cerceau an architect in the modern sense, a designer and originator of buildings? The claim is a little difficult to establish, and impossible to deny with any certainty: the inquiry takes the reader into pleasant fields of examination, into good buildings that have perished, and others that exist: fields where this comment cannot follow: Charleval, Verneuil, Gaillon, the church of Montargis, the Château of the same name and its appendages, houses in Orléans, and parts even of the Louvre are considered; it seems, too, that Du Cerceau made a design for St. Eustache at Paris, or at least for its west front—the realization of which it would be well for Paris to possess.

*Chapter vii* consists of a full catalogue of the drawings which are known to be by Jacques Androuet, and of those which may be ascribed to him: and *chapter viii* deals with his published work, mainly, of course, his engravings; in the course of which a word is said for him as an early master of etching. *Chapter ix* is a *Résumé*: and, as all the volume hitherto has been devoted to the one Jacques Androuet *l'Ancien*, or the Senior, as he was called to distinguish him from another Jacques Androuet who appears later (perhaps a son), so the *résumé* deals with him and his work alone, and includes a very interesting discussion of the mission of engraving in the sixteenth century, a subject which cannot be undertaken here. The rest of the family—Jean and Baptiste, both architects of renown, and the less visible shadows that once bore the name—are the subject of *chapter x*: and, finally, there is a very full Bibliography, in itself interesting reading. So that the handsome quarto before us, though not exactly an epoch-making book, and perhaps missing a chance in not being more decidedly a living-over-again of that New Life on which the sixteenth century prided itself, in France, is yet a book to read through with sincere pleasure, and then to refer to on many an occasion. Like all such French books, yes, practically *all*, it has no index; unlike many, it is so far logically arranged and so free from the vice of writing "about and about" the subject, that what one wants he will generally find, pretty soon. Straightforward and simple presentation of his case seems to be our author's strong point: it is a good thing to excel in.

RUSSELL STURGIS.

New York City.

LES BRONZES DE LA RENAISSANCE. LES PLAQUETTES. Catalogue Raisonné, précédé d'une introduction, par ÉMILE MOLINIER, attaché à la Conservation du Musée du Louvre. [Bibliothèque internationale de l'Art, sous la direction de M. Eugène Müntz.] 8vo, tome premier, accompagné de 82 gravures; pp. xl-215: tome second, accompagné de 26 gravures; pp. 238: Paris, 1886, Librairie de l'Art, J. Rouam.

The study of the smaller arts of the Italian Renaissance, so long neglected, has received of late a strong impulse. It is no longer collectors alone who prize them, but the student and historian of art find them valuable auxiliaries to an acquaintance with works of greater importance, and guides in the study of artistic influence. Medals and coins, enamels and bronzes, ivories and miniatures have in turn been made to contribute their share to a general knowledge of the artistic development of the Renaissance. But we are surprised to find, on taking up M. Molinier's monograph on *Plaquettes*, that this hitherto ignored or despised branch of artistic industry can be made to yield results of the greatest interest, when treated by so masterly a hand. One is tempted to show in detail how this is done in these two interesting volumes: but they cover so many schools and such a multitude of artists that the most that can be done in this short notice is to call attention to the interest of the subject, and to explain this class of monuments, the character and extent of which, probably, but few know. A good definition of the term is given by M. E. Piot:<sup>1</sup> "We call *plaquettes* small bronze bas-reliefs whose use seems to have been to preserve the memory of the works in metal of the best artists of the Italian Renaissance: paxes, vestment-buttons, clasps, ensigns, *imprese* or *medagliette* attached to hats, ornaments attached to armor or to belts or nailed to the harness of horses on gala-days. Finally, bas-reliefs for the decoration of coffers, salt-cellar and inkstands; all objects which were executed in silver or gold, hammered or chiselled with the greatest delicacy. Sulphur-impressions were taken of these fine works, and they were then cast in bronze in order to preserve the memory of them and to serve as models and examples." As M. Molinier remarks, the only fault to be found with this definition is that it represents all plaquettes to be simply mechanical reproductions; whereas many are real works of sculpture, and certainly a whole class of devotional tablets were entirely original. The great use of these bronze plaquettes was that they familiarized the sculptors of the xv century with antique models, by innumerable reproductions. This was especially the case with those which reproduced ancient engraved gems, of which the sculptors of the Renais-

<sup>1</sup>*L'Art ancien à l'exposition de 1878*, p. 414.

sance evidently made collections. In this way, antique works of art became known with great rapidity from one end of the peninsula to the other, and the plaquettes were thus made a vehicle for the spread of the ideas of the Renaissance. M. Molinier also proves satisfactorily the important fact, that these minute works were used directly as models by the sculptors of the xv century in executing works of monumental sculpture, and that it is not the larger works which were imitated in the smaller. M. Molinier first gives a list of direct imitations from the Antique; he then presents, in chronological order, the works that can be clearly attributed to various masters; and, finally, classifies the great mass of anonymous works under schools, such as those of Padova, Venezia, and Firenze. The Paduan school is of especial interest for the early date and excellence of the works it produced, many of which show, as is natural, the style of Mantegna. The Venetian school was not far different in style, though in the early period it shows a rudeness and an un-classical Teutonic element that distinguishes it. To show the interest of the subject, it will be sufficient to cite the names of a few artists to whom groups of plaquettes are assigned: Donatello, Filarete, Caradosso, Camelio, Sansovino and *Il Riccio*. The industry seems to have taken its rise in North Italy, and we find it adopted in Tuscany only towards the xvi century. It spread from Italy to Germany, France and Flanders. The plaquettes executed in Germany and Flanders are relatively rare and for the greater part anonymous. Two are attributed, from their signature, to Peter Vischer. As to the subjects employed: during the earlier period, in fact, through the entire xv century, they are divided about equally into classic and religious; the former being generally reproductions of ancient works to serve as models, the latter, of contemporary works to serve as memorials. As we advance in the xvi century, religious subjects vanish almost entirely, and we find introduced a great variety of *genre* and allegorical representations. The plaquettes also become rarer, and more difficult to assign to separate artists, it being necessary in most cases to rely merely on conjecture from similarity of style. It is but recently that any collections of them have been attempted. The museums of Berlin and the Louvre both have quite a number, while several private collections made by French amateurs equal or surpass those in public museums.

M. Molinier has shown us what a multiplicity of uses plaquettes were made to serve: how they formed parts of small works, such as coffers for articles of toilet, how they were imitated in paintings and miniatures, were adapted to bindings or reproduced in ceramics. But most important of all is the fact, just alluded to, that they served as models for the great sculptors of the early Renaissance. A very clear and familiar instance is given by Donatello: the most classic of all his sculptures are the ex-

quisite medallions on the Riccardi palace at Firenze, and these can be practically proved to have been copied from bronze plaquettes reproducing antique gems, some of which were already in the Medici collection. This is but an instance, and throughout Northern Italy, even more than in Tuscany, we find many proofs of the custom, as on the portal of the Palazzo Stanga of Cremona (now in Louvre), at the Certosa of Pavia, and at Brescia. Passing from the use of reproductions of the antique to the influence of original plaquettes by artists of the xv century on contemporary monumental sculpture, it is often possible to prove this relationship. Thus, Maderno's plaquettes are imitated by the Rodari in various sculptures executed by them at Como. At Bergamo, in the Colleone chapel, we again find Maderno imitated; at Cremona (Palazzo Stanga) the great Caradosso *l'Antico*, the school of Donatello and Melioli. What is more surprising, we find a repetition of this phenomenon in France, showing how early Italian models, in this portable shape, had found their way across the Alps. At St. Michel of Dijon (about 1500), at Orléans, and at Blois, we find imitations of Maderno; while there are other instances at Pagny (Bourgoigne) Arnay-le-Duc (Bourg.), Tours, Chartres, Gaillon, etc.

A. L. FROTHINGHAM, JR.

HISTOIRE DE L'ART BYZANTIN considéré principalement dans les miniatures, par N. KONDAKOFF, professeur à l'Université d'Odessa: édition française originale publiée par l'auteur, sur la traduction de M. Trawinski et précédée d'une Préface de M. A. Springer, professeur à l'Université de Leipzig. [Bibliothèque internationale de l'Art, sous la direction de M. Eugène Müntz.] Tome premier, accompagné de 29 gravures; 4to, pp. 202: Paris, 1886, Librairie de l'Art, J. Rouam.

That most neglected of all great historical developments of Christian art—the Byzantine—is treated by Professor Kondakoff in one of its most interesting phases, miniature-painting. In a carefully written and interesting introduction, Professor Anton Springer, the well-known art-critic of Leipzig, discusses the general character and bearings of Byzantine art, especially in its relations to early-Christian art and to the mediæval art of the West. His standpoint is a happy mean between an ex-cathedra denial of any life and movement in Byzantine art and its apotheosis at the expense of autochthonous Western art. Starting with the uniformity of early-Christian art in East and West, Prof. Springer considers that Byzantine art, as a separate development, arose only when, in consequence of religious and political scission posterior to the rise of Islam, the West

separated itself completely from the East. So, instead of attributing certain types to a Byzantine origin, he would derive them from the stock common to both East and West before the separation. Professor Springer is quite right in giving, as one of the causes of our ignorance of the true character of Byzantine art, the reason, that we are out of sympathy with it, and cannot understand it. A few words will show how he regards Professor Kondakoff's work. It presents the history of Byzantine miniature-painting in a new light, far more brilliant than had ever been conceived. The Russian author proves that "classic antiquity lived for a long period under Byzantine forms," and "refutes the preconceived opinions according to which Byzantine art was, in its very essence, invariable, stiff, corpse-like, and bore from its birth the marks of most abject decadence." Up to the close of the tenth century it preserved, intact, technical processes of great perfection, and followed models inherited from antiquity: "Byzantium, besides, derived from the Greeks and Romans the gift of representing in a palpable way, by personifications, the most abstract conceptions." As Professor Springer adds, Byzantine art can be understood only when it is taken as the expositor of general civilization, of the religious sentiment, of ecclesiastical education, and even of popular traditions. This never had been even attempted until the publication of this book. A strong contention, however, is made by the German writer in favor of narrowing the influence of Byzantine art in the West. For him there is no "Byzantine question."

Turning now to Professor Kondakoff's work itself, we find a *first chapter* devoted to the historical role of miniatures in Byzantine art; to the separation, into groups, of the various types of illuminated manuscripts; and to a general sketch of the history of this branch of art in the East. Its main importance lies in its continuity. While in mosaic-paintings, to cite works of monumental importance, there is a gap of many a century between the time of Justinian and that of Constantine Porphyrogenetos, in the illuminated manuscripts we are able to follow every stage of artistic development, and even various contemporary schools. In this study the first step to be taken is *classification*. The great mistake, hitherto, has been that the miniatures have been taken as separate pictures, disconnected from the text they illustrate and from the group of works of which they form a part: this has prevented any true conception of the subject. This is developed in the *second chapter*, on the historians of Byzantine miniature-painting, in which are passed in review all writers who have during the last two centuries paid any attention to these works of art, among whom Agincourt and Labarte are the most prominent. This review makes the insufficiency of their work and their erroneous standpoints only too evident. The author says: "In my opinion the real method of studying Byzantine

miniatures is to take as a point of departure the idea that these miniatures are the very expression of the historical movement of Byzantine art," of which they form a special chapter. In them the "purely external, bibliographical and anecdotic interest must give way to the historical analysis of the inner sense of the manuscripts illustrated, which must, for this purpose, be classified in groups, according to the subjects which they represent. The intimate bonds that unite art to literature will then be evident, or, in other terms, the moral and theological ideals that inspired them both. . . . Many points of the intellectual life of the East, hardly noticed until now, will appear in a strong light, when the history of Christian art is written with as much scientific exactitude as that of classic art."

Thus, important groups of manuscripts can be formed—the Old Testaments, Psalteries, Evangeliaria, Menologia, and Lives of Saints. This grouping explains many obscure facts better than a mere uncritical chronological arrangement, for it was very customary, in miniature-painting, to copy early miniatures executed three or five hundred years before. By grouping together manuscripts of the same class, the original types and the gradual changes in them are more easily noted.

M. Kondakoff makes this study of miniature-painting the basis of a scientific treatment of Byzantine art, its origin and development and its essential qualities. We shall wait until the rest of the author's work is before us before analyzing or criticising his views on the subject, and confine this notice to an examination of the material brought forward in the remaining chapters of this first volume. The *third chapter* treats of the earliest examples—those of the fourth, fifth, and sixth centuries: the *Calendario Filocaliano*, the Milanese *Iliad*, the Vatican *Vergil*, the Viennese *Genesis*, the Cotton *Bible*, the Roll of *Joshua*, etc. These are not, properly, works of Byzantine art, but still they are executed by Greeks, and show classic influence. While in the *Iliad* we see Pompeian influence, the *Vergil* may justly be termed the prototype of Byzantine miniature-painting; but most important of all, and the earliest instance of the illustrated Bible, is the Viennese *Genesis*, in which the naturalistic styles of the two manuscripts just mentioned seem to be combined. It is not only from these precious originals that we may obtain knowledge of the art of this early period: in a manuscript of the poems of Nikandros, executed in the eleventh century, there are more than 40 beautifully executed illuminations copied from originals of the third or fourth century; and this is but an instance of quite a common custom. In showing the interest of all these early works, M. Kondakoff seeks to demonstrate that they are the product of a school far more artistic and original than the contemporary school in the West which produced, for instance, the mosaics of Santa Maria Maggiore, at Rome. This school threw off the yoke of debased Roman art,

and linked itself to Hellenic traditions: it was a Renaissance of Greek art in Christian times, but, before the formation of a distinctively Christian art, the producer of original creations. The most obvious departure from classicism, in these early works, is a growing tendency to naturalism; this naturalistic feeling of the art of the period immediately preceding the formation of truly Christian types is nowhere so clearly shown as in the miniatures.

The middle of the fifth century saw the rise of a new art, eminently Christian, and iconographic instead of picturesque. It arose in Byzantium, and its finest remaining monuments are some of the mosaics of Ravenna. Here begins the Golden Age of Byzantine miniature-painting, and it extends from the close of the fifth century to the time of the Iconoclasts. It is still represented by such works as the Viennese *Dioskorides*, the Rossano *Gospels*, the Syriac manuscript of *Rabula*, the *Cosmas* of the Vatican. Naturalism has vanished from these works, and we see—instead of the aim at general picturesqueness, at naturalness of pose and action—a desire to express character, individuality: but the technique is still that of antiquity. The moral and social change to which this artistic revolution corresponds is well characterized by the author, who pictures the contrast between the immorality that was a relic of paganism and the religious fervor that peopled the Thebaïd, until the entire renovation of society on a truly Christian basis was accomplished. It is only in the *Cosmas* and the ms. of *Rabula* that we begin to find an interesting iconographic treatment of religious subjects, while the symbolism of the early period is still in part retained: both these date from the sixth century, the former being the most important Byzantine illuminated manuscript, erroneously considered until now to be a ninth-century copy of a sixth-century original. In reality, it is a most characteristic expression of the art of the time of Justinian. It is a work of breadth and force, full of style and artistic surety, which shows the monumental tendency of the age, as contrasted to the minuteness of the former style.

According to M. Kondakoff, the influence of Iconoclasm on the artistic development has been much overrated, and he narrows down both the period and the extent of the war against images. He is inclined to attribute to this time (about 800) some manuscripts which show a rude revival of the antique, out of hatred to the new or iconographic style. The illuminations in them are naïve illustrations of the text, without order or relation to one another; but they are still executed with the ancient technique in a debased form. This is the last stage before the establishment of the hieratic manner, which is generally understood by the term Byzantine. This anecdotic, didactic, and ascetic direction is the distinctive trait of the eighth and ninth centuries, combined with exceeding rudeness of

execution and poverty of ideas. At this time, arises the important series of illustrated Psalteries: some of the types were early, others were now established, and all were handed down through several centuries. At this time, a strong personal element appears in the miniatures, allusions to contemporary events and personages. M. Kondakoff carefully dissects the works of this transitional epoch, and shows its relations to the early classic period, on the one hand, and to the developed Byzantine, on the other, as to ideas, symbolism, and technique. The author sees, at this time, the strong influence of the barbarous elements of the Empire caused by the preponderance, in the administration and in the army, of the Armenian, Slavic, and other non-Greek nationalities.

The second volume of this admirable book will deal with the reform of Byzantine art. There can be given nothing but praise to the work, so far as it has gone. It is drawn on such new lines that comparative criticism is not possible: but the unprejudiced standpoint of the author and his mastery of the subject have enabled him to handle with great constructive skill a mass of subject-matter extremely difficult of treatment.

A. L. FROTHINGHAM, JR.

AMIAUD ET MÉCHINEAU. TABLEAU COMPARÉ DES ÉCRITURES BABYLONIENNE ET ASSYRIENNE ARCHAÏQUES ET MODERNES, avec classement des Signes d'après leur forme archaïque. Royal 8vo, pp. XVI-148. Paris, 1887, Ernest Leroux.

The reader of old cuneiform and linear texts must face numerous and hard problems. Chief among these are the archaic signs. Upon the proper identification of these depends the reading and interpretation of every text. Not every Assyrian scholar is at home in this field, nor can all hope to be. So then, if these old texts are to be made available for the ordinary Assyrian scholar, he must have the requisite archaic syllabary at hand. Until he has this, the inscriptions of De Sarzec and the numerous and important seals already at hand, and continually being brought to light, are to him a sealed book.

The much-abused and troublesome question of a so-called Sumero-Accadian language must remain a "rebus," until we can read a language purely ideographic, written in characters almost hieroglyphic. Otherwise we can not know whether we are dealing with an Accadized Semitic text, or a Semitized Accadian text. We must go back of this mixture into the pre-Semitic times and language. Here we find a pure text, written, to be sure, in an extremely archaic character. But I venture to say, after all the warm and even personally abusive discussions of this question on the ground

of bilingual texts, that we must take our stand only on the unilingual texts, found in the recent discoveries of De Sarzec, and the early Chaldean seals. Upon a thorough and familiar acquaintance with the archaic signs hangs the whole question of their original forms and significations. The hitherto erroneous and often ridiculous originals assumed for a large number of the most common signs have been due to the lack of knowledge of archaic forms.<sup>1</sup> The road through the modern artistic and then the older Babylonian to the assumed archaic form is uncertain, and in many cases entirely misleading. But we must work from the archaic downwards through to the simplest modern forms, thus following at once the changes in each period and a study of sign-development.

Our two French *savants* have taken a decided step in the right direction. Their work, at hand, exhibits great familiarity with archaic texts. Happily they had at their disposal, in the Louvre, the immense and valuable De Sarzec collection, besides numerous other small archaic texts. Their work evidently has in view two purposes, (1) to exhibit a development of the signs, (2) to furnish an archaic syllabary. The principle of arrangement of signs is substantially that of Norris. However, it is not according to the modern equivalents, as in all published syllabaries, but according to the archaic forms. This principle, it is true, is not always strictly adhered to. But, in view of the difficulties of such a task, which none except those who have tried it can realize, the order is eminently good, and the principle well carried out.

The work takes up, under successive numerals, 296 signs, also a supplement of eleven signs, making in all 307. Just under the No. is given the archaic or linear form under survey. In a column to the left appear the ancient and modern Babylonian forms of the same, ranged apparently so as to exhibit the development of the late sign. In the corresponding column to the right are found the archaic and modern Assyrian forms. To all examples cited, except the late signs, abundant references are given. No syllabic or ideographic values are assigned, as the work is evidently intended only for Assyrian scholars. But the authors have added to several signs notes of great value (*e. g.*, *cf. ku*, No. 283).

The inscriptions discovered by De Sarzec form the basis of the work; though quotations are given quite freely from Sargon I, Naram-Sin, Nebukadrezzar, Rammân-nirari, *etc.* Out of the 307 signs treated, the Gudea inscriptions furnish the archaic forms of 251. Where the linear archaic form of an old Babylonian form has not yet been found, a *forme supposée* has been made to head the list. By analyzing the elements of analogous signs, the authors have thus filled up 58 places, conjecturing the linear

<sup>1</sup> Cf. my Dissertation, *Introduction into the Inscriptions discovered by M. E. de Sarzec*, p. 6, § 9.

form, before the cuneiform character had been developed. In the case of 26 signs, no assimilation into the modern form has been made. In eleven cases, the assimilation is regarded as uncertain or only probable.

One of the first interesting points of discovery in the examination of the signs is the fact that one modern Assyrian character represents two or more archaic forms (cf. 21 with 270; 70 with 94; 93 with 99 and 135). This may be a solution in part of the numerous syllabic and ideographic values of a large number of signs. Another point, noticeable at once, is the fact that one original sign or form became in the modern style two separate and distinct forms (cf., especially, Nos. 103, 218).

Let us now look at some of the individual signs and their treatment:

30. The two parts of this sign stand apart on the original, and are evidently two signs.

34. Marked *non assimilé*: is it not another form of *il*?<sup>2</sup>

38. A much better linear form is found in l. 8 of an inscription on a door-socket in the British Museum.<sup>3</sup>

58. The *assimilation incertaine*, I think, is here out of place except in so far as it refers to the author's conjecture. The sign is undoubtedly *Uruk* (ki), Erech: *vid. Urbau* Inscription, De Sarzec, pl. 8, col. II, l. 4.

85. Is this not *tik*, *tik*?

95. Checked *non assimilé*, with a couple of questionable conjectures. Lehmann (in *ZA*, II, p. 251) says *Amiaud* is now almost certain of its identification with *sun*, *sin*, *rug*. But I am inclined to think that the proper modern form is *mis*, *šid*, *rid*;<sup>4</sup> and that the forms exhibited under No. 134 are explanatory of this form rather than of the one under which they stand.

111. This *non assimilé* should perhaps be replaced by the sign *kár* (*kan*) (*vid. A. L. S.*, No. 75).

121. *Non assimilé* should again be crossed out and replaced by *ki*.<sup>5</sup> The discussion under No. 294 properly belongs here.

126, 127. The archaic oneness of the two modern forms here given is quite questionable.

134. *Vid.* remarks on No. 95.

181. The modern sign which should here displace *non assimilé* is probably *taḥ*.

199. The Entena inscription (l. 6) furnishes a beautiful linear form.

210. *Non assimilé* should probably be replaced here by *suḥ*, *sur*.<sup>6</sup>

272. *Non assimilé* should here give place to *šes*, *uru*.<sup>7</sup>

<sup>2</sup> Cf. Dissertation, p. 15, col. III, l. 13 (De Sarzec, pl. 16, col. III, l. 13).

<sup>3</sup> Copied by me Aug. 13, 1886. *Entena* is the *patesi* here. The inscription is to be compared with De Sarzec, plate 6.

<sup>4</sup> Cf. Dissertation, p. 13, col. II, l. 5.

<sup>5</sup> *Idem*, p. 15, col. III, l. 22.

<sup>6</sup> *Idem*, p. 15, col. III, l. 14.

<sup>7</sup> *Idem*, p. 16, col. IV, l. 3.

294. This is a superfluous *forme supposée*, and the forms and discussion here inserted belong to No. 121.

At the end of the archaic syllabary are given the numerals as found in the Gudea inscriptions. Following these is a list of late Assyrian signs—in Norris' order—referring by Nos. to their archaic originals. Next follows a list of Assyrian signs, not developed in the archaic syllabary. At the end of the book we find a few unassimilated signs, and, in outline, the order of archaic classification followed.

The work is autographed in an admirable style. It is a credit to the firm of Leroux, which puts, at present, so many valuable works into the hands of scholars. The work itself deserves our hearty welcome, and the authors our thanks. It is a substantial step forward to a history of the development of wedge-writing.

IRA M. PRICE.

*Morgan Park, Ill.*

STRASSMAIER, J. N., S. J. BABYLONISCHE TEXTE. INSCRIFTEN VON NABONIDUS, KÖNIG VON BABYLON (555–538 v. Chr.) von den Thontafeln des Britischen Museums copirt und autographirt. Pp. 160. Leipzig, 1887, Eduard Pfeiffer.

The author of the work before us is already well known to the "cuneiform" public through his invaluable *Alphabetisches Verzeichniss*, his *Babylonische Inschriften im Museum zu Liverpool*, and his *Babylonische Verträge aus Warka*. He has demonstrated, by energy and skill, his peculiar fitness for the arduous work of copying texts. At the meeting of the Oriental Congress in Vienna in Sept. 1886, his proposition to publish the inscriptions of Nabonidos was enthusiastically received. *Heft I* is already out, and *Heft II* is in press.

The Preface contains some thoughts that deserve a larger circulation. The author is right when he says that the method of most rapidly advancing the science of Assyriology lies in publishing texts, in putting before the world the material that is now lying in the British Museum, unknown and untouched. The niceties of the language, the proper significance of words, can be better determined after a reasonable amount of literature is published and deciphered, than when we possess so small a proportion of the Museum treasures.

Among the 40,000 clay tablets discovered by Smith and Rassam, the editor has found more than 900 inscriptions from the years of Nabonidos, the last king of Babylon. These he expects to publish autographically in four or five parts—provided the work is well received. At the end of the

text-publication he expects to give in transcription a *Wörterverzeichnis* to the whole work. Each *Heft* is expected to contain 160 pp. *Heft I* contains 265 of these 900 inscriptions; all from the first seven years of Nabonidos' reign. The inscriptions in the parts to follow, as in the one at hand, will be arranged in chronological order.

The matter thus furnished will be invaluable in opening up to us the private and public life of the Babylonian Empire just before its fall, the social condition of the Jews in exile and captivity, and the great moral forces at work in the declining years of one of the world's greatest powers. Father Strassmaier is doing, almost gratuitously, for the science of archæology, history and exegesis, a work of inestimable value. How few men would or could spend the long hours of weary toil which were necessary for copying from all sorts of tablets, and autographing, the 160 pp. before us.

Real and substantial encouragement should be given to the publication of these texts by every friend of Assyriology. Especially, ought this to be the case, since the work is so well done, by one who is an experienced copyist. In honor, too, to the publisher, Herr Pfeiffer, who has assumed the publication of this work, and issued it in so convenient and careful a manner, allow me to bespeak the patronage of all readers of wedge-writing.

IRA M. PRICE.

*Morgan Park, Ill.*

## ARCHÆOLOGICAL NEWS.

### SUMMARY OF RECENT DISCOVERIES AND INVESTIGATIONS.

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### GENERAL REVIEW.

In **EGYPT**, the most important discovery, during the season of 1886-87, was that of the great temple of Boubastis, made by M. Naville, acting for the Egypt Exploration Fund. It is to be regretted that the season was so far advanced as to make it necessary to abandon work when only a third of the space had been excavated, leaving the rest to be done in the season of 1887-88.

The importance of the discoveries of tombs and sarcophagi at **SIDON** was such as to bring Hamdi Bey and Baltazzi Effendi on a special archæological mission from Constantinople, and to them is due the discovery of other sarcophagi of great interest. Several of these elaborately sculptured sarcophagi are judged to be by Greek artists, and would therefore be of value for the development of Asiatic-Greek plastics.

In **GREECE**, the excavations on the Akropolis by the Greek Archæological Society continue to yield excellent results; most interesting is the discovery of the Pelagic approach to the Akropolis: special attention is called, also, to the researches of Prof. Milchhöfer in **ATTIKA**, and of Mr. Bent on the island of **THASOS**. Mr. Bent's thorough acquaintance with the Greek islands has enabled him to make discoveries of considerable importance which give an idea of Thasiote art from the archaic to the Roman period. Excavations are also now in progress at Eleusis, Mykenai, Oropos, and Sikyon.

In **ITALY**, new excavations in the necropolis of Orvieto are of great interest: of a revolutionary character is the discovery made at Civita Castellana (the ancient **FALERII**) of the ruins of two Etruscan temples, one of which is

in a good state of preservation as to its ground-plan, and has yielded frescos and a large number of sculptures. As the description in Vitruvius had been until now the only authority for the plan, proportions and decorations of the Etruscan temple, the unexpected and almost contemporary discovery of two monuments will probably change all previously formed theories. The publication of the results by Count Cozza is impatiently awaited.

The characteristic of recent investigations in FRANCE has been the discovery of numerous Gallic cemeteries, and a consequent increase of our knowledge of the industries and culture of that period.

## AFRICA.

### EGYPT.

MR. FLINDERS PETRIE'S RESEARCHES.—Under the title, *A Season's results in Egypt*, Mr. Flinders Petrie gives, in the *Bab. and Orient. Record* (p. 151 sqq.), an outline of his investigations during the winter of 1886–87, which supplements the partial one already printed in the last number of *JOURNAL*, pp. 143–44. The trip was made partly in company with Mr. Griffith.

“At DEIR EL GIBRAWI, north of Siût, there are ranges of tombs, many of which are white-washed or plastered; those which we could afford time to scrape down a little [by removing the late plaster coating of Koptic or Arabic times], showed long inscriptions of the XII or XIII dynasty; a careful cleaning of these tombs would restore a whole group of inscriptions to light. At RIFA, some miles south of Siût, a range of grand tombs of the same age awaited a copyist; . . Mr. Griffith . . has copied them completely. They have high façades entirely cut in the rock in the splendid bold style of the Middle Kingdom, rivalling and even exceeding that of Beni Hasan. . . A striking feature of the XII dynasty tombs in middle Egypt is the great figure of the deceased, far over life-size, on the wall: sometimes a row of statues of the deceased, his wife and sister or mother, will be seated on a bench in the inner chamber, impressive from their simple largeness and gigantic solemnity.

“At SHEKH GABR two or three tombs of the V or VI dynasty are well worth visiting; being on the eastern cliff, a long tunnel has been cut for each in the rock, parallel to its face, so as to obtain a wall for the false doors, which need to be in the western side leading to the blessed Amenti. These tombs we completely copied. They are of Ka-khent and his wife Khent-kau-s; also of another Ka-khent, who appropriated some titles (*Suten-se, en khert-f, meri-f, semeruakherpah enab neb-f*) which were disallowed afterward and erased. There is a very curious tomb round the corner of the cliff southward, with a sloping side passage and a flight of side steps cut

in the rock ; if a later adaptation, it is more elaborate than anything seen elsewhere. . .

"In the range of tombs at **HIERACONPOLIS** is one with a great quantity of fine coffers and gold-work represented, which were presented to the temple there by the last of the Ramessides, all the objects bearing his name and titles. At **EL KAB**, opposite, a tomb of the time of **Sebakhotep II** has had its stone-cut inscription published more than once ; but the painted walls had never been cleaned from the blackening by the bats. With water, brushes, and cloths, we went carefully over it and cleaned one of the most thickly peopled tombs I have seen. Not only all the owner's relatives, connexions, followers, and even friends are shown, but also the workmen who excavated the tomb and their families. Altogether over 70 names were copied with their titles. The general family character of the tombs at **El Kab** and around there is striking ; usually the walls show a crowd of relatives, down to first cousin's grand-children ; but all, except the nearest, in the female line.

"The great open quarries of **SILSILEH** are entirely Græco-Roman, as Greek inscriptions and marks may be seen 50 or 100 feet high-up on the quarry-face, close to the hill-top ; the earlier quarries are probably in the gigantic subterranean cuttings. Here and elsewhere, the quarry marks have enabled us to identify the quarries of many Ptolemaic temples."

Mr. Petrie spent two months at **DAKSHUR** surveying the pyramids. After a delay of five weeks he received permission to excavate, and uncovered the original base and casing of the two southern pyramids, but had not time sufficient to find the base of the northern pyramid, which had been much destroyed. He writes, May 23, to the *London Academy* (June 4) : "While exploring in the desert west of **Dakshur**, I found the line of ancient road from **Memphis** across the desert to the **Faiûm**, marked out with way-marks. These marks were blocks of limestone, about eighteen inches cube with a shallow socket on the top, holding a pillar about nine inches square, and two and a half feet high. All are now overthrown, and many broken or removed. There is a continuous series of these marks at intervals of about two-thirds of a mile, or just 1,000 Egyptian double cubits of 41.2 inches ; and in many places there are intermediate marks at 1,000 single, and 500 single cubits. This abundantly proves the use of this cubit as an itinerary measure. Now I had pointed out in *Naukratis* that the itinerary measure, the *schoenus*, was nearly, and probably exactly, 10,000 double cubits. Spaces of 1,000 of these cubits being marked on a road renders this supposition almost a certainty.

"I have traced the road for eight miles into the desert, finding in all sixteen marks ; beyond these there seems to be a blank, but I am told that there are stones along to the **Faiûm**. There is also another road starting

from the same point at Saqqarah, and running west. It is marked by a line of flints swept up on either side. These lines are fifty cubits apart, but no distance measures are to be discovered. This is the first time that actual roads have been traced in Lower Egypt; but I hear of a fine Roman road, with stations, having been lately found leading to the porphyry quarries from Keneh."

**ALEXANDRIA** (near).—*Early Christian Cemetery*.—The notice of this cemetery given on p. 145 is here supplemented from a letter of Mr. E. Stowe, by whom the pits were frequently visited in 1883.

"There were then visible narrow galleries driven in the solid rock with *loculi*, these latter generally containing but one or at most two skeletons. One chamber, however, was stuffed full of a congeries of skulls and bones: and, as this was evidently an ancient accumulation, I could only come to the conclusion that after a certain period the *fossore*s, wanting new space, had emptied the old *loculi* and relet the tenements as new ones. It seemed highly probable that there had been one or more entrances to that series of galleries from the face of the cliff or from the seashore. It should be explained that the rock lies with considerable irregularity, and that on the inland side there were interments in detritus at almost as deep a level as that of the galleries. Often these were mere cells, some of them lined with slight slabs of stone. From the character of the pottery I supposed them to be pre- rather than post- Augustan: but I could not speak with certainty as to that. The following passage occurs in the notice to which I have alluded (*Times*, May 4): 'Some shattered terracotta coffins without inscriptions and without any trace of human remains, have been found irregularly buried in parts of the superimposed rubbish-mounds.' In 1883, there was unearthed at the same spot one of these coffins unbroken. It had no lid at the time of its being found. Its length did not exceed four feet, the sides were perpendicular, and it was rounded at the corners. It presented, in short, the appearance of an ordinary earthenware foot-pan. The form being one which I had not previously met with in the neighborhood of Alexandria (or, in fact, elsewhere), I sent a note to Prof. Maspéro at the time, enclosing a rough sketch and detailing its position, in case he thought it of sufficient interest to have it preserved. There was also exposed to view at the date to which I refer, in an excavation on the hill east of Sheikh Shatbi, a series of tombs resembling in elevation old wine-vaults. They were arched in ashlar, the piers being constructed of bricks. Height, to the crown of the arch, 3 ft.; width, 2 ft. 8 in.; width of the piers, 1 ft. 3 in. The bricks were burnt bricks, somewhat rude, roughly ridged on one face, and measuring 9 in. by 2 in. The chambers were recessed to a depth of about 7 ft., and were faced internally with white cement, from a quarter to half an inch thick. Three tiers were visible, the upper one

being but little below the present level of the soil. The archways of the lower tier were 4 ft. high, instead of 3 ft. like the upper ones, and one of the recesses of that lower tier contained a mass of skeletons, the skulls of which crumbled at a touch. I was unable to find anything other than the architecture to give any clue as to date.—*Athenæum*, July 2.

**BŪLĀQ.**—*Museum.*—It has been decided, by the Egyptian authorities, to remove from its present damp and injurious site the famous museum at BŪlāq, Cairo.—*Athenæum*, Nov. 5.

**FAÏŪM.**—*Ancient Tomb-paintings.*—Dr. Fouquet writes from Cairo to the French *Acad. des Ins. et Belles-Lettres*, describing some ancient paintings discovered during March in a cave in the Faiûm: it contained a large number of tombs mostly accompanied by Greek epitaphs. The walls were decorated with many portraits. Unfortunately, the native discoverers destroyed the greater part of paintings and inscriptions.—*Revue Critique*, 1887, No. 21.

W. M. FLINDERS PETRIE writes to the *Academy* (Dec. 3), "I shall be working in the Faiûm this winter."

**KANOBOS.**—Mr. Petrie writes: "On lately visiting the apparent site of Kanobos, a mile west of Abukir, with Mr. W. Grant (who is reclaiming Lake Abukir), I found a large site of rock-cut baths in the sea; also pieces of two granite colossi, and two large sandstone sphinxes, thrown into the sea to form a breakwater. On one of the sphinxes I read under the water the name of a Psammetichos; but the great granite fragments are more akin to the colossus of Merenptah found in the ruins by Middlemass Bey a few years ago. Unhappily, a fort has swallowed up nearly all the probable area of the great temple of Serapis; but we now know, however, that both Merenptah and Psammetichos adorned this place. It seems to have been abandoned before the later Roman age."—W. M. FLINDERS PETRIE in the *Academy*, June 4.

**NAUKRATIS.**—*Controversy regarding the Inscriptions.*—Messrs. Petrie and Gardner claimed for Greek Naukratis an origin early in the seventh century B. C., and the latter considered the earliest of the inscriptions found there to date back to about 650 B. C. and to revolutionize the theory of the early Ionic alphabet. In Germany, both Professors Hirschfeld and Kirchhoff oppose themselves to this view. Prof. Hirschfeld holds that before the time of Amasis (572–28 B. C.) Naukratis was an Egyptian town, though the Milesians and others may have held fortified posts elsewhere in Egypt; and that the series of inscriptions does not begin before 560 B. C., those of Abu-Simbel still retaining their position as the earliest specimens of the Ionic alphabet. The strange forms that occur in the Naukratite inscriptions are referred by the German epigraphists to individual peculiarities or carelessness of the writers. Mr. Gardner still maintains that, "there

is an unbroken series of inscriptions from the dedication of Polemarchos to that of Phanes, *i. e.*, from the reign of Amasis (or perhaps earlier) to the Persian conquest. Before Polemarchos, and at a considerable interval, hardly if less than fifty years, are inscriptions which still appear to me the earliest specimens of the Ionic alphabet. These I would assign to the earliest Milesian settlement of Naukratis, before Amasis gave the town to other Greeks also." Prof. Hirschfeld considers the epigraphic evidence brought forward by Mr. Gardner to be very scanty in anything approaching support of his theory and to be conclusively against it. Mr. Petrie brings forward two strong arguments for a pre-Amasis Greek Naukratis—the scarab-factory which was evidently in Greek hands under Amasis' predecessors, and the archæological strata, apparently undisturbed, which show that even the scarab-factory is not the oldest evidence of Greek settlement in the town.—Prof. HIRSCHFELD in *Rheinisches Museum*, XLII, pp. 209–25, and *Academy*, July 9 and Aug. 20; Prof. KIRCHHOFF in his *Studien*; Mr. GARDNER in *Academy*, May 14, July 16, Aug. 27; Mr. FLINDERS PETRIE in *Academy*, July 16.

**PI-BAST=PI-BEETH=BOUBASTIS=TELL BASTA.**—*Discovery of the great temple of Boubastis.*—The mounds of Tell Basta are situate within a few hundred yards of the railway which connects Cairo with Ismailia, and are about half a mile distant from Zagazig station. Lofty and rugged, their broken and blackened summits standing out against the clear Egyptian sky, they represent the wreck of a once great and famous city—the Pi-Bast of ancient days, the Boubastis of the Greeks, the Pi-Beseth of the Bible.

In the admirable paper on Excavations in Egypt which Mariette published in 1879, the eminent explorer says that, after all the interesting mounds of Egypt shall have been exhausted, then, in order to be quite certain that nothing has been passed over, *par surcroît de précautions*, one might attempt the mounds of Boubastis with the faint hope of finding some few monuments of later times. Despite their great extent, Egyptologists have never given much attention to these mounds. They have been abandoned to the dealers in antiquities, who have thoroughly rifled the large nekropolis of cats, from which they get the numerous bronze figures of that sacred animal which fill the shops of Cairo. M. Naville, has transferred the pick and spade of the Egypt Exploration Fund from Tell-el-Yahoodieh to the neglected rubbish-heaps of Tell Basta, where his exertions have been signally rewarded by the recovery of some remains belonging to what must once have been one of the most magnificent edifices of Egypt.

It was one special point that directed M. Naville's attention to Boubastis. In all the excavations which the Egypt Exploration Fund has made in the Delta, there is one remarkable fact to be noticed. Absolutely no monuments of the XVIII dynasty have been found. At Sān, Khataaneh, Pithom,

Nebesheh, Saft-el-Henneh, *etc.*, there are monuments of the XIX dynasty, and sometimes much older ones, of the XII and XIII dynasties; but in that case the gap between the Middle Empire and the XIX dynasty is complete. We are thus led to the conclusion that under the Thothmes and the Amenhoteps a great part of the Delta was still in the possession of foreigners, and not under the dominion of the Pharaohs. During the winter, M. Naville heard that some interesting tombs containing scarabs of Amenhotep III had been found at Tell Basta under ruined houses. Attracted by this reported discovery, M. Naville—accompanied by Mr. F. Llewellyn Griffith, and subsequently joined by Count d'Hulst, both officers of the fund—shifted his camp to Tell Basta about the middle of April. He had but one month left at his disposal, and nothing was farther from his intentions than to commence a great excavation. The tombs proved to be a myth; and—with slight hope of finding anything important at a site unsuccessfully attempted by the late Mariette Pasha—he decided to sink some pits in the bed of the great central depression which marks the area of the temple. This depression is distinctly quadrangular, and is hemmed in by heights composed of innumerable strata of brick buildings: thus exactly verifying the celebrated description written three-and-twenty centuries ago by Herodotos, who says (II. 138):—

“The temple stands in the middle of the city, and is visible on all sides as one walks round it, for as the city has been raised up by embankment, while the temple has been left in its original condition, you look down upon it wheresoever you are. A low wall runs round the enclosure, having figures engraved upon it, and inside there is a grove of beautiful tall trees growing round the shrine which contains the image of the goddess. The enclosure is a furlong in length and the same in breadth. The entrance to it is by a road paved with stone for a distance of about three furlongs, which passes straight through the market-place with an easterly direction, and is about 400 feet in width. Trees of an extraordinary height grow on each side the road which conducts from the temple of Boubastis to that of Hermes.”

Such was the great temple in its prosperity; yet so completely has it vanished that archaeologists took its utter destruction for granted. The main features of the scene were, however, still traceable. The square hollow defined the temple area. A break in the continuity of the surrounding mounds marked the site of the gateway. The long line of the street leading from the temple of Bast to the temple of Thoth (identified by Herodotos with Hermes) was yet visible. Here and there was to be seen a weather-worn block of granite, or the mouth of one of Mariette's deserted pits. To go to work in a small way upon so large a site would be to court the same disappointment which befell Mariette. M. Naville assembled a gang of some two hundred fellaheen, and attacked the quadrangular enclosure

in three places at once. The results were as immediate as they were unexpected. One excavation disclosed a number of large monolithic columns and massive architraves, all of red granite, and all prostrate and broken. Another brought to light a wilderness of sculptured building-blocks, crowded with basrelief groups and hieroglyphic inscriptions. These also were of red granite. The columns bore the cartouches of Rameses II; the blocks were engraved with the names and titles of Osorkon II, of the XXII dynasty, who reigned some 380 years later.

As the work progressed, the ruins became more intelligible. The temple was oriented from east to west, and the place of columns proved to be the hypostyle hall. Beyond this, further to the westward, the pit of sculptured blocks represented a second great hall which M. Naville calls "the festive hall;" while beyond this, again, the third pit yielded constructions of a still later date, forming apparently the end of the temple. This part also was in red granite; and here was found the name of Nekhtorheh, who ruled about 480 years later still. Hereupon, M. Naville concentrated his forces upon the two older spots, increased the number of diggers to 400 hands, and tasked himself to clear as much as possible of these halls of Rameses and Osorkon. The excavations made rapid progress. There emerged fallen columns of the beautiful clustered-lotus pattern with lotus-bud capitals, architraves emblazoned with royal insignia, heads, trunks, and limbs of colossal statues, some in groups of three together and some in pairs. In the hypostyle hall was a colonnade of magnificent monolithic columns in red granite, with capitals in the form of lotus buds, or palm leaves, or the head of Hathor, with two long locks. That they are older than Rameses II is proved by the fact that on one of them the name of that king is cut across the ornaments of the column. Though Rameses II and Osorkon II have inscribed their names everywhere, it is very possible that we must attribute this fine edifice to the XII dynasty. The style of the work is decidedly too good for the XIX dynasty. Near the colonnade there were also several statues. One, of life-size, sitting, bears the cartouche of Rameses VI, a very rare name in the Delta. By and by, the name of Useresen III turned up, thus carrying back the date of the temple to the time of the first great Theban Empire; and some days later, a still more important stone was found, inscribed with the cartouche and titles of Pepi Merira, of the VI dynasty, whose name is found also at Sān—one of the last pyramid-building kings of the Ancient Empire, and founder of the earliest temple of Denderah. The name of Pepi reminds us that Boubastis is spoken of by Manetho in connexion with the II dynasty. The cartouche of Pepi is a long one, like that at Sān, and he is said to be *Lord of On and Ant*.

Meanwhile it became evident that there were scarcely any statues in the hypostyle hall, but that the great hall of Osorkon, in which there were no

columns, must have been crowded with groups and single figures. At the entrance lay two shattered colossi of Rameses II, in black granite, wearing the crown of Upper Egypt. Near these lay two smaller colossi of the same Pharaoh, the lower limbs shattered, but the upper halves uninjured; to say nothing of two others in green granite, two in red granite, and several groups representing Rameses enthroned now with a god and now with a goddess.

Several mutilated groups of two or three colossi together have likewise been found, and we shall probably not be far wrong if we attribute these also to Rameses II. Though not one of the foregoing statues is unbroken, many of the heads have escaped without damage: among others, a beautiful and unique specimen in red granite, wearing the helmet of Osiris, and another in black granite with the crown of Upper Egypt. The former, which has fallen to the share of the Egyptian Government, is already on view at the Bûlâq Museum, and the latter is on its way to England. Here also, in the great hall of Osorkon, were discovered a standing statue of a governor of Ethiopia bearing the customary title of *Royal Son of Kuah*; a limestone group of a priest and priestess engraved with an interesting geographical inscription (XXVI dynasty); a small statue with the name of Achoris, a king of the XXIX dynasty, who reigned but ten years (B. C. 393-83), and whose monuments are of the rarest; and a fine squatting statue in black granite with the name of Prince Mentuherkhopshef, a son of Rameses II, who wears the sidelock of youth (a fashion still universal in Nubia) and is entitled *General of Cavalry of his Father*: but it is the work of some earlier dynasty, usurped for the prince, the older inscriptions being erased to make way for the newer. All these are comparatively perfect, and will shortly be exhibited in London by the Egypt Exploration Fund.

Of greater historical interest than the portrait statues are the sculptured blocks which lie piled in inconceivable confusion on the site of Osorkon's hall. These blocks lined the walls, and the basreliefs with which they are closely covered formed, when *in situ*, one huge tableau, or perhaps two tableaux, representing a great festival given by the king, most probably on his coronation day. Though cut up into as many sections as there are blocks, it is yet possible to gather something of the subject. Here were processions of priests bearing standards and offerings; other priests, two and two, carrying shrines and sacred boats supported by long poles upon their shoulders. Osorkon, wearing sometimes the crown of Upper Egypt and sometimes that of Lower Egypt, occurs over and over again, generally with the cat-headed goddess Bast by his side. He offers incense and libations to various gods, or is himself worshipped as a deity by the priests. Occasionally he is seen with his queen, Karoama. Most curious of all are some subjects representing religious dances, or gymnastics executed by the priests, some of whom make fantastic gestures, while others lie flat upon

the ground. Nothing in the least resembling this strange ceremony has previously been discovered upon the monuments. A fragmentary inscription makes record of a festival *which takes place every fifty years*. The entire hall, which M. Naville entitles "the festive hall," was constructed of red granite, all the sculptured surfaces being without polish. Were money, time, and labor of no account, it would be well worth while to rebuild these blocks in their original order and so restore the whole subject; but, as it is, the next best thing is to obtain paper impressions, which can afterwards be arranged in sequence and even reproduced in plaster casts. This, as far as was possible in the time, has been done. The main difficulty was to turn and lift such huge fragments: for this work M. Naville engaged a gang of stalwart *shayalin*, or porters. The near approach of Ramadan made it necessary to suspend the work till next season. One of the very last finds was another fragment of inscription with the cartouche of Pepi—a discovery which possibly presaged others yet more important, and intensified the regret with which the explorers quitted the scene of their labors. It is calculated that they have cleared about one-third of the temple, which Mr. Griffith estimates as being about 900ft. in length from the back of the building to the gateway, with an average width of 150ft. These dimensions do not fall far short of those of the great temple of Sān=Tanis, with which it may be compared.

The historical results thus far go to prove that Osorkon II, of whom little has hitherto been known, must have been the most powerful monarch of the Boubastite line; but that the name of his father Shashank, the Biblical Shishak, who was not only the founder of the dynasty but who is supposed to have been a native of Boubastis, should not once have turned up, is both strange and perplexing. Like the great temple of Denderah, and perhaps also that of Tanis, the original sanctuary upon this spot would seem to have been founded by Pepi I (VI dynasty), whose place in history, according to Brugsch, is about 3,300 years before the Christian era. It was probably rebuilt about a thousand years later by Useratesen III (XII dynasty), again partly rebuilt, or much enlarged and enriched, a thousand years later still by Rameses II (XIX dynasty). Some 460 years after Rameses II it was taken in hand by Osorkon II, who added the festive hall, and perhaps yet more buildings at the eastward end. Last of all, about B. C. 380, we find Nectanebo I making additions at the western extremity of the pile behind the sanctuary. The history of the temple may therefore be said to extend over a period of more than 3,200 years.

On the conclusions to be drawn from these data we quote the following passage from the latest report received from M. Naville: "It is a most singular fact that at Boubastis, as at Tanis, we find traces first of the VI dynasty, then of the XII dynasty, and then occurs a gap which carries us

down to the XIX dynasty. No name belonging to the XVIII dynasty has yet appeared; though some may yet be discovered. Scarabs bearing the name of Amenhotep III have, it is true, been found from time to time in tombs at Boubastis; but, so long as we fail to discover any trace of the XVIII dynasty in the ruins of the temple, we are compelled to believe that the Pharaohs of that line ruled only in Upper Egypt, and that the Delta must still have been in the possession of the Hyksos. Not perhaps till the rise of the XIX dynasty was the strength of the foreign element finally broken; and Seti I may have been the first King who once again actually reigned over both Upper and Lower Egypt."

M. Naville hopes to clear the whole site from end to end next season.—*London Times*, July 1; letter of M. NAVILLE in *Academy*, July 2.

#### ALGERIA.

**NEO-PUNIC INSCRIPTIONS.**—In the last number of the *Bulletin de l'Académie d'Hippone*, M. C. MELIX published, with translation and commentary, a number of Neo-Punic inscriptions, found at different periods.

**CHEROHELL.**—*Eccavations continued.*—New fragments of mosaics have been discovered both between the guardhouse and the civil prison and on the neighboring ground belonging to M. Dupont. Among the objects found are a remarkably fine torso of Diana, of white marble, and a colossal marble head.—*Revue Critique*, 1887, No. 24.

The French papers assert that colossal statues of Hercules, Venus, and Jupiter have been found here, and removed to the Museum. At this time workmen are uncovering a buried palace, near the sea, where a mosaic of great size and fine execution has been uncovered.—*Athenæum*, June 11.

**TAGREMARET** (near).—*Inscriptions.*—The milestones with inscriptions have been discovered to the south of Mascara, near Tagremaret, between Saïda and Frendah. One of these texts names the Emperor Quintilius, brother of Claudius Gothicus, and is the only inscription known to bear his name. These inscriptions make known the ancient names of two localities: **COHORS BREUCORUM** = *Tagremaret*; and **KAPUT URBS**, in the same region.—*Revue Critique*, 1887, No. 26.

#### TUNISIA.

**NEW INSCRIPTIONS.**—M. A. PAPIER has published in the *Bulletin de l'Acad. d'Hippone* (1887) about fifty inscriptions found recently in Tunisia and the province of Constantine. Quite a number of these are Christian. An important inscription found near Roum-el-Souk (close to the border-line between Tunisia and Algeria) is completed as follows: *Pre salute d(ominorum) n(ostorum) (quatuor) | Diocletiani et Maximiani perpetuorum | Aug(ustorum) et Constanti e[t M]aximiani nobilis | sinorum Cæs(arum) te[m-*

*pl*]um dei Mercuri | [*v*]etustate delaps(um) [ab ordine amp]lissimo | universi sen[tentiaque] ma[g](istratus) . . . . rensium | sumtibus suis restitueru[nt et de]dicaverunt | curatores | anno Fortunatiani mag(istri). | Aridius Primus. Its date is 303-4, and it commemorates the restoration of a temple of Mercury. Of still greater importance is a Christian inscription found at Philippeville (the anc. Rusicada) in April 1886. MAGNA QVOD ADSVRGVNT SACRIS | FASTIGIA TECTIS | QVAE DEDIT OFFICIIS | SOLLICITVDO PIIS | MARTYRIS ECCLESIAM VENERAN|DO NOMINE DIGNAE | NOBILIS ANTISTES PERPETVV[S] | QVE PATER | NAVIGIVS POSVIT CHRISTI LE|GISQVE MINISTER | SVSPICIANT CVNCTI RELIGIONIS OPVS. Its date is, probably, the fifth century, and it contains a number of unusual expressions. It commemorates the building of sumptuous porticos before the church by the bishop, Navigius.

**RECENT OFFICIAL EXCAVATIONS.**—Some more details may be added to those given already on p. 148. In the Christian cemetery of LEPTIS (*Lamta*) four tombs paved with mosaics were found, two with the following epitaphs: ANTI|STA DO|RMIT IN | PACE VIXI|T ANNIS C, and ADEO|DATA|REQVI|ESCIT|IN PAC|E VIXI|T ANNI|S XXV. The remains of the numerous tombs at SULLECTHUM (*Arch Zara*) are compared with certain Phoinikian, Syrian and Jewish tombs, being half-cylinders placed on two or three steps; near this nekropolis, there opens another subterranean one, whose walls are furnished with rectangular loculi, as in the Roman catacombs.—*Gazette Arch.*, 1887, No. 3-4, *chron.* p. 6.

**THE STONE-AGE IN TUNISIA.**—The May number of the *Matériaux pour l'histoire de l'homme* contains an original memoir of importance by Dr. R. Collignon, entitled *Les Ages de la Pierre en Tunisie*. The author spent three years (1883 to 1886) in Tunisia, carrying out investigations for the Anthropological Society of Paris; and a summary of his results, illustrated by maps, is presented in this memoir. It is interesting to note that he has discovered, in conglomerates near GAFSA, palaeolithic implements similar in type to those of Chelles and St. Acheul. Worked flints, whether palaeolithic or neolithic, are most abundant in the southern part of Tunisia, if not confined to this area. A limited district, including the mountainous country of ELLEZ, is characterized by its megalithic monuments. There seems to have been a race of dolmen-builders distinct from the workers of the stone implements; and survivals of these ethnic types may possibly be recognized in the present population of Tunisia, each type still being represented in its ancient area.—*Academy*, June 11.

**CARTHAGE.**—*Report on excavations.*—The aqueduct which in the second century of the Christian era led to Carthage the waters of Zaghouan and Djouggar is known in the greater part of its course, and is still used for

the supply of Tunis. On December 15, 1884, M. Vernaz discovered at La Malga the entrance of a subterranean aqueduct, through which he could pass for a distance of 200 metres. The construction appeared to be of the same date as the aqueduct of Carthage. Here he found a system of cisterns and gates by which the admission of water to the aqueduct might be regulated. The subterranean aqueduct appears, however, never to have fed the cisterns of Bordj-Djedid. Glass, pottery and lamps of Roman make were found, but nothing of special value. This system M. Vernaz attributes with hesitation to the Christian period, in opposition to M. Daux, who regarded it as Phœnikian. Near the cisterns of Borj-Djedid is a system of drainage formed of nine branching conduits opening into a single canal.—*Revue Arch.*, 1877, July-Aug., pp. 11-27.

**Sfax.**—*Nekropolis.*—The French garrison at Sfax, in the work of fortification, dug a trench to the north of the town, where a strange mode of native burial was brought to light. The body was placed in a large jar of rough pottery and buried just below the level of the ground. Large tiles, rudely marked with cross lines, were arranged to form a gable-covering for the jar. The open spaces at either end were then closed by flat tiles. When a jar was used for burial purposes it was broken around the centre and elongated as much as was necessary. The fractured portions were afterwards cemented, and the jar hermetically sealed. The smaller jars, containing the remains of children, needed no elongation. The jars were unornamented (one only was found marked with parallel circles) and contained only the robed bodies of the richer and unrobed bodies of the poorer inhabitants.—*Revue Arch.*, 1887, July-Aug., pp. 28-34.

## ASIA.

### CEYLON.

**YAPĀWA** (or Subhapabatta).—*Restoration of the Dalada Maligawa.*—A. E. Williams, district engineer, reports to the Government, under date of February 1, 1887, the restoration of this Buddhist monument of the XIII century: he adds a ground-plan, front and side elevation, showing the sculptural decoration. The restoration consisted in digging out the missing stones, resetting them in place, and rebuilding walls in ruinous condition.

The construction is as follows: a flight of 24 steps with a plain balustrade leads to a broad terrace, from which rises another flight of 40 steps leading to another terrace, from which rises and leads to a small palace a flight of 35 steps flanked by heavy balustrades profusely ornamented with sculptured figures and bas-reliefs: the palace itself is also decorated with sculpture. Mr. Williams says, "that the work is, now, much as it was when first built,

I think does not admit of any doubt. . . . On the rises of some of the steps were found Tamil-figures roughly cut in the stone, from which I infer that the workmen were brought from India."

#### HINDUSTAN.

**RECENT PUBLICATION ON THE MONUMENTS OF INDIA.**—The results of the archæological mission to India confided to Dr. Gustave Le Bon by the French Government have been already indicated, in several ways, in the *Revue Scientifique* and the *Tour du Monde*, and the official and scientific report which he has sent to the Ministry is in the shape of five folio volumes accompanied by more than four hundred plates and photographs. Dr. Le Bon has just published,<sup>1</sup> however, a popular summary made doubly interesting by the important series of monuments of architecture and sculpture of all the regions and series of India which is only surpassed in extent by the official series of the English Government. Unfortunately, the author pays but slight attention to Hindu art, in his text, and in many cases leaves his interesting illustrations unexplained.—*Revue Critique*, 1887, No. 17.

**COLLECTION OF ANCIENT INSCRIPTIONS OF INDIA.**—Steps have been taken by Dr. Burgess (Nov. 1886) for the publication of a general collection of the ancient inscriptions of India. He has lately addressed a circular letter to the different provincial Archæological Surveyors on the subject of the collection of impressions of inscriptions and forming district catalogues of them: "The total number of inscriptions all over India is so large, and the importance of securing the best possible copies of those of historical interest is so great, that it seems very desirable some systematic effort should at once be made to give practical effect to the resolutions of Government, and to secure as exhaustive lists of them as possible. Until such lists are compiled, there must necessarily be a certain amount of haphazard and imperfection in the selection and arrangement of those submitted for translation. The lists ought to contain *all* the inscriptions published or unpublished in each district, and, for convenience, these should be arranged under the following provinces:—

1. (a) Bengal Circle including (b) Assam, (c) South-Western Frontier districts, and (d) Orissa.
2. (a) North-Western Provinces and Oudh Circle with (b) Central India Agency and (c) Central Provinces.
3. (a) Punjab Circle with (b) Rajputana and (c) Kashmir.

<sup>1</sup> *Les Civilisations de l'Inde*, par le Dr. GUSTAVE LE BON, chargé par le Ministère de l'Instruction publique d'une Mission Archéologique dans l'Inde. Ouvrage illustré de 7 chromolithographies, 2 cartes et 350 gravures et héliogravures, d'après les photographies, aquarelles et documents de l'auteur: Paris, Firmin Didot et C<sup>ie</sup>, 1887, VII-743 pp. in fol.

4. (a) Bombay Presidency with (b) Sind.
5. Haidarabad Territory.
6. Mysore and Coorg.
7. Madras Presidency.

"In the 'Lists of Remains in Bombay Presidency, Sind, and Berar,' completed by me early last season, are included mention of all the inscriptions in the districts that I heard of during the preparation of the work, and translations of a considerable number collected by the survey in Gujrat are added in an appendix. For Madras the survey is also in possession of similar information in the 'Lists' for that presidency, the whole numbering about 3,000 inscriptions on stone and copper; and at the same time with the Bombay lists I completed a volume of about 230 pages of copies and translations of Tamil and Sanskrit inscriptions. Dr. Hultzsch has now been appointed Epigraphical Assistant to the Archaeological Survey of Southern India, and on his taking charge he may be expected to expedite the formation of complete lists for the Madras Presidency. For Mysore and Haidarabad the survey is in possession of but little information of the kind required. For Haidarabad what exists is very fragmentary, and returns would have to be obtained for any complete list. And, as there are no satisfactory lists of antiquarian remains, temples, tombs, old forts, *etc.*, these latter might be collected at the same time. For Mysore, returns were made several years ago to Mr. L. Rice, reporting 3,722 inscriptions. Beyond indicating the villages where inscriptions are to be found, these returns were apparently very imperfect; but they might be made the basis of a more exhaustive and detailed list for the Mysore territory. For Upper India I am not aware of any very extensive materials for such lists. Indeed, in this respect it is much behind Madras and Bombay. The inscriptions in the Museums of Calcutta, Behar, Lucknow, Lahore, *etc.*, might readily be described and catalogued, and those that have been published or referred to in the Journals of the Asiatic Societies, the Indian Antiquary, and in General Cunningham's reports might be indexed. These materials are important, and ought to be prepared with all other published information available. But, for all the districts included in the three survey-circles of Upper India, a thorough and systematic series of returns are necessary.

"From these Government resolutions it will be observed that it is made the duty of the surveyors to supply me with tabulated returns of all inscriptions as soon as met with; to include in the annual reports a complete tabular statement of the inscriptions met with, including all such as are already mentioned in the existing reports of the survey; special attention is to be given to discover all inscriptions in the districts under survey; and the surveyors can address, either directly or through the local Governments and Administrations, all district officers for information respecting them.

If the scheme is heartily worked in this way, we may hope in the course of a year or so to have a collection of information which when indexed would be invaluable as a basis for the future systematic pursuit of Indian epigraphy."

**EXPLORATION IN SOUTHERN INDIA.**—We make the following extracts from a report by Mr. A. Rea.

"On completing the survey of the large temple of Virinjipuram, I proceeded to **TIRUMALAI**, nearly 30 miles south of Vellore. This village, which is chiefly occupied by Jains, is built at the base of a steep, precipitous mass of huge rocks. Several miles to the east is **DEVIKAPURAM**, in the Arni jaghir, and on the borders of the Polur taluk. It has a temple in a walled enclosure on the summit of a hill, and another very large one at the base, similar in size and style to the temple at Virinjipuram. All the antiquities at **TIRUMALAI** are Jaina, and are scattered about the face of the huge rock which overlooks the village. The largest is *the temple*, built on a series of platforms ascending from the base of the hill some distance up its side. The principal *shrines* are two in number, and situated on the west side of the rock. The first, or outer one, has its entrance from the east, and is a complete temple in itself, with entrance *gopura*, porch, shrine and tower. A large courtyard-wall encloses, not only this shrine, but another larger one which is placed almost in a line to the west of it, but on a platform about 25 feet higher up the hill. This last temple is at present being completely restored. The two buildings, though comparatively large, are of no great importance archæologically. They evidently, in parts at least, date from Chola days, or about the XI century; but, as they are very similar to others already examined, it was scarcely necessary to survey them. The chief objects of interest are the rock-cut Jaina sculptures, paintings and rock-inscriptions. Close behind the temple, the rock shelves inwards, forming a series of natural caves. In one of these, some chambers have been built up in brick, forming a number of rooms, which were probably once on a time the residence of the Jaina priests attached to the temple. The brickwork of this portion seems, from all appearances, to date from about the XV century. The walls are built entirely under the overhanging rock, which has subsided slightly, and seems in danger of crushing them. The building is extensive, going inwards beneath the rock for a depth of about 45 feet, and extending along its face for over 90 ft.; none of this has been excavated, the whole being a natural cavity filled in with brickwork. On the left, a stair leads up to a first storey, containing a small shrine dedicated to Dharmadevatha. Its back wall is formed by the rock, which is sculptured with a fine set of four figure-panels; these cover a surface of 12 ft. by 4 ft. 6 ins. The left panel shows a standing female figure richly jewelled, grasping, in her left hand, what appears to be a plantain palm 6 ft. high; her left foot rests on the

head of a lion. Four smaller figures occupy the background. The panel on the right has a typical Jaina-figure standing on a lotus, with a snake beside him, and branches rising up in front. A female figure stands on each side. The next panel has a figure sitting cross-legged; chowrie bearers and ornament occupy the background. A standing figure with snake-hood and attendants occupy the panel on the extreme right. On the right of this range of buildings, another stair leads to the upper storey of the *Vihara*, as it may be called. The most of the rooms are on this level. The brick walls, both internally and externally, have once been completely coated with plaster, and this has been used as the groundwork for a series of remarkable paintings, which have evidently covered their whole surface. Those on the exterior have mostly disappeared through the scaling off of the plaster, but, in the interior, some remain in fairly-good preservation. The ceiling of the upper storey is formed by the under side of the overhanging rock, and this also has been decorated with some pleasing designs in color. Two distinct periods of painting are observed, for in one place some painted plaster has scaled off, and shows another set of paintings on a plaster surface beneath it. The best of the frescos is a circular panel about 3 feet in diameter with a Jaina-figure occupying a disk in the centre; from this radiate a number of lines subdividing the panel into a set of smaller ones. Each of these is occupied by different figures variously grouped; one shows a number of worshipping nuns with white hoods, another, lions, elephants and other beasts, and so on. As a rule, the other paintings are very fragmentary, having mostly either scaled off, or been partially destroyed by the damp. The geometrical and floral designs on the ceilings are bright and effective in their coloring, and are in fairly good preservation. Almost on the summit of the same side of the rock, at a height of nearly 100 feet from the ground, is a brick porch with a small cupola, built on a ledge or natural platform on the hill face. It shelters and forms the shrine for a remarkable, rock-cut, Jaina-sculpture, representing Sigamani Nathar. The image is a large one, being 17 ft. in height; the hands measure 2 ft. 6 ins., the arms 9 ft. 6 ins. in length, and the breadth across the chest and arms is 6 ft. 9 ins.

"There are a number of lengthy inscriptions in old Tamil characters cut on various parts of the hill. In addition to the rock-sculptures, there are a number of fine Jaina-images in different parts of the place. Close to the west side of the hill is a fine tank, and a mound with some stones, marking the site of a previous temple. Some large sculptured stones are near. One stands upright, it measures 4 ft. 6 ins. in height above the ground, and 7 ft. 3 ins. broad: it represents an armed warrior with two females standing on each side, and may possibly be a *sati* stone.

"The head-draftsman while working at SHOLINGHUR, surveyed six temples,

all large. Two of them, evidently from peculiarities of the site, show some very unusual arrangement in their plans; the outer walls are polygonal, and some other interesting features make them specially worthy of note. One temple has some carved pillars rivalling in intricacy of workmanship and design the fine piers in the *Kalyana Mandapa* at Vellore. Another pillar in a mandapa is of a rather original design, and quite different in style of architecture from the building in which it now is. It is not unlike, in some respects, some of the elaborate piers seen in a few of the northern caves. The rock-cut temple at **MAHENDRAVADI** was also surveyed. It is cut out of a single boulder, but is not designed so as to form the outline of a structural building, like the *rathas* at Mamallapuram. One side only is excavated, so that in plan it is exactly like the plainer and earlier rock-cut caves at Mamallapuram. The boulder measures 32 ft. across the front, and 19 ft. in height. The vestibule has four massive piers, and the same number of responding pilasters on the side walls. The shrine is a small rectangular chamber, entered directly from the vestibule; a *dvarapala* is sculptured on each side of its door. On one of the pilasters are four lines of an inscription in archaic characters. The style of this excavation is identical with similar works at Mamallapuram, Mamandur, Narsapalayam, Siyamangalam, Pallaveram, and other places. As I expected, its examination fully supports my theory—advanced after I discovered in 1885 that the Mamandur-caves were the work of the Pallavas—that all these rock-cut temples are the work of the ancient dynasty which in the early centuries ruled over the greater portion of the Southern Peninsula."

**ELEPHANTA.**—A new cave has been discovered in close proximity to the large main caves which are usually visited at Elephanta, near Bombay. It is situated on the north face of the hill, and is in a line with the smaller caves on that side of the island. There is no carving or ornamentation about the entrance, the facade being quite plain. The operations now being undertaken may lead to discoveries of archaeological importance.

**KOSAM.**—*The Cave of the Shadow.*—The discovery of a Gupta inscription on the Prabhosā cave was noticed on p. 153. Dr. Burgess writes to the *Academy* of June 4, giving further details. Dr. Führer, descending the rock, got an impression of the inscription, and at the same time entered the cave, which he has correctly identified as the cave of the Shadow (Buddha's), and found three longer inscriptions in it, and more important than that outside, and four short ones. The contents of these Dr. Burgess hopes shortly to announce. The inscription outside states that the cave was constructed by Rājā Gopāla; and, if we turn to Beal's *Buddhist Records of the Western World*, vol. I, p. cvii., we find "the cave of Gapāla" mentioned, with an account of the appearance of the sacred Shadow in it, as told by Sung-Yun, who visited it in A. D. 518.

**MADRAS** (Government of).—**PERIANATTAM**.—*Prehistoric Antiquities*.—Mr. A. Rea, of the Archæological Survey, reports (Aug. 15, 1887) an inspection of these antiquities: "They consist of some fine groups of kistvaens and stone-circles. On the Villiyin hill (Survey No. 349), there are three or four tombs; and on the northern face of the Vallari hill (Survey No. 350) there are about sixty or seventy.

"On the Villiyin hill at least four classes of remains exist: (1) Stone-circles, with megalithic kistvaens or dolmens in the centre. (2) Circles, with no remains in the centre. (3) Megalithic kistvaens or dolmens, without circles. (4) Pottery sarcophagi, without stone enclosures.

"The remains generally are much the same as the megalithic tombs at Pallávaram; but, whereas at that place only occur one or two examples of the dolmens (in the centre of circles), at Perianattam a large number exist in almost complete preservation. Of *Class 1*, above noted, I saw over a dozen. They are formed of a number of large stones laid together, roughly forming three sides of a square, leaving the fourth side—towards the east—open, and the inside clear. A large, flat slab is laid over the top of these as a roof. Close around the central pile is a circle of smaller stones. All these gradually rise towards the centre in a sort of cairn or mound. At a distance of a few feet from the first enclosing circle is an outer concentric one formed of blocks of stone, each stone about two or three feet in diameter; this outer ring completes the tomb. The majority of the remains consist of those noted under *Class 2*. Some of these circles are quite complete, without a stone out of place, and they have no trace of anything remaining or having been in the centre. One, which I measured, had a circle of 27 feet in diameter, with 27 stones closely laid together; the inside level was 2 feet above the surrounding ground. Of *Class 3*, there are a number of examples. For classification they might be included under those of the first, for they are simply the kistvaens or dolmens with their surrounding circles either wholly or partially removed. One had nine large stones laid together, with a flat slab, 6 feet by 5 feet and a foot thick, laid on the top. Of *Class 4*, I saw one partially-complete example, but broken pieces of thick pottery at different places showed that others did, or still do, exist there. The one referred to was almost identical with the pyriform tombs at Pallávaram, measured 1 ft. 6 ins. in diameter, and 2 ft. in depth. It was badly cracked, and had only some broken pieces of earthenware and large stones in the earth inside."

**DADAMPATTI, PARAVAI, ANAPANADI, KODAIKANAL**.—We extract from Mr. Rea's report of Sept. 22, 1887: "I have inspected and excavated some ancient burial-places at Dadampatti, Paravai near Thovaremon, Anapanadi near Madura, and the cromlechs near Kodaikanal. I made a splendid collection

of ancient pottery, and in some of the tombs found a large number of bones, also a complete human skull." [*Indian items from Robert Sewell, Esq.*]

**WYNAAD.**—*Prehistoric tombs.*—At a meeting of the British Archæological Institute (London, Dec. 1) Dr. M. W. TAYLOR read a paper *On some recent diggings in Prehistoric Graves in Wynaad, Southern India*. He had this year excavated a number of these barrows and kistvaens, and had found a remarkable identity, even in detail, with British examples. Within the cists, with the remains of the body, were deposited the sepulchral vessels, the "food vessel," and drinking cup; outside, a quantity of pottery and terracotta idols, amongst which the most frequent was the figure of the cow, and the emblem of the cow's horn. Dr. Taylor called attention to the remarkable correspondence between these cow-idols and those which had been found by Dr. Schliemann at Tiryns, Mykenai, and the fourth city of Troy, which had been referred to the worship of Hera and the cow-goddess Io. He claimed to have shown that these special objects found in Indian graves have their analogues in the archaic cities of Greece, and that the cow-worship of which they are the symbols, surviving in India into far more recent times, is the manifestation of a cult the prototype of which arose on the banks of the Nile.—*Athenæum*, Dec. 10.

#### PALESTINE.

**PALESTINE EXPLORATION FUND.**—*Publications.*—The society will publish during the year, and present to subscribers, the survey of Jaulán with maps and memoirs; the survey of Pella; an account of the Saida sarcophagi; and Mr. Schick's discovery of Constantine's *agora*, which seems to put an end at last to the Fergusson theory on the site of the church of the Holy Sepulchre.—*Athenæum*, Dec. 24.

*Survey of the Jaulán, by Herr Schumacher.*—The first *Quarterly Statement* for 1888 of the Palestine Exploration Fund will contain the beginning of a Memoir by Herr Schumacher on his exploration of Jaulán and Ajlún. "The district of Jaulán, the Golan of Manasseh, which has been surveyed, is 39 miles in length at its longest points and 18 in breadth. It comprises an area of 560 sq. miles. On the best map of Palestine there are found about 150 names: on Schumacher's there are 600, being the names of ruined towns, springs, ancient highways, remnants of oak forests, perennial streams, great fields of dolmens. The district of Northern Ajlún, also surveyed, contains 220 sq. miles, and shows on the map 334 names of places. There are in the Memoir detailed plans of 100 places—churches, theatres, vaults, mausoleums, temples, walls, columns, capitals, street pavements, sarcophagi, caves, cisterns, birkets, aqueducts, and ornamental work; there are collections of masons' marks, Greek inscriptions, drawings of dolmens and stone walls; and there are detailed plans of Umm Keis (Gadara) and Beit Ras

(Capitolias). The district contains about a thousand dolmens scattered over distant fields."—*Palestine Expl. Fund: Quart. Statement*, Oct., 1887.

AKKA.—The road-works have here brought to light a stone upon which is carved in relief a curious double cross on a stepped pyramidal base. It was found to the south of the present Christian cemetery, half-way between the gardens on the present Haurân (Safed) road.—*Palestine Exploration Fund*, 1887, Oct., pp. 224-25.

JERUSALEM (near).—*A rock-cut Tomb*.—In the Wâdy Yasul, east of the Bethlehem road there are some tombs hewn in a cliff of soft rock. The first has a cave-like opening, about 7 ft. in width and height, leading into a square room (14 by 10 by 9 ft.), with straight walls and nearly horizontal (slightly arched) ceiling: in the S. W. corner is a well-mouth, with a few steps in it, about 5 ft. deep, leading to a cistern that extends under nearly the whole room. At the further end of this chamber a small door, with a recess to receive a closing slab (for which the marks of hinges and bolt still remain), leads into a second smaller chamber about 9½ ft. square, which seems to have been the lodging of a living man, and not a tomb: a smaller chamber opening out of this contained bones and mould. There is a probable connection, not yet verified, between this group and another whose entrance was not far from it. The main chamber, with a slightly arched ceiling, has on three sides a stone bench 2½ ft. broad and 2 ft. 2 ins. high: level with its top, on these three sides, are loculi, three on each side, 7 ft. deep, 1 ft. 8 ins. wide, and 2 ft. high, each arranged to be closed by a slab. From the back of this tomb, by the side of two loculi broken into one, a narrow descending passage with three steps leads down to a rock-wall, 2½ ins. thick, through which a hole is pierced showing a (probably) large chamber containing a "large smooth coffin-shaped stone," probably a sarcophagus, 6 ft. long. The entrance to the chamber has not yet been discovered. "All the work hewn in the rock described above is as nicely and correctly done as it is in rock-tombs round about Jerusalem, except in the tombs of the Kings."—C. SCHICK, in *Pal. Expl. Fund, Quarterly Statement*, April, 1887.

TIBERIAS.—*Ruins of the city and nekropolis*.—Notice was given in the JOURNAL (p. 155) of Herr G. Schumacher's discovery of the wall of Herod's Tiberias. His full Report is printed in the April Statement of the *Palestine Exploration Fund*, from which the following is taken.

*Jewish Nekropolis*.—"The construction of carriage roads in the Liva of 'Acca now and then leads to interesting discoveries. One of these roads was commenced at the western gate of Tiberias, taking a western course up the mountain, and, in cutting through an elevation near the gate, an extensive, very ancient Jewish cemetery, was discovered, which could be followed up to a distance of about 600 yards from the gate. The graves were some 2 or 3 feet below the ground, one built close to the other, in

rows of three and more, and only separated by a wall of 1 ft. 4 ins.: the width of each grave was 1 ft. 8 ins., its length up to 7 ft., and its depth generally 2 ft. The building-material was composed of hewn and unhewn basaltic stones, and a good white mortar; the interior of the grave was plastered. Similar graves were also found within the present city-wall. Large slabs lying about prove that they formed the cover of the graves. Next to these rows of graves, which evidently belonged to a poorer class of people, were found handsome sarcophagi, cut out of a limestone of white color, the rock of which exists near the hot-baths. They were lying about in disorder, 1 to 3 ft. below the surface, covered by large basaltic and limestone slabs; a regular orientation could not be made out, but most of them had the head-end toward the east. Their length varies from 4 ft. 3 ins. to 7 ft. 1 in., their width from 2 ft. to 2 ft. 4 ins., their height from 2 ft. to 2 ft. 3 ins. The head-end shows in its interior a cushion, and is generally round, while the foot-end is square; in some, both ends are rounded. The long sides of the sarcophagus now and then show a relief-ornament with a tablet, but no inscription; the ornamentation is elevated but 3 inches, and is quite primitive. Top and foot are distinguished by a simple moulding. Some of these sarcophagi were taken to the Serail in order to be preserved, others were broken to pieces. The ornaments of these sarcophagi, as well as their entire arrangement, are very closely similar to those which I found at Kala'at el Husn, on the other side of Lake Tiberias, the supposed Gamala of Josephus" (see Schumacher, *Der Djaulân*, 1886, Leipzig).

*Ancient walls of castle.*—The following supplements the description of the wall on p. 155: "Coming from the western gate of the city of Tiberias, the ancient city-wall can be followed up to the cliffs of the mountain above described. Above the cliffs traces of a well-built wall, 60 yards long, run up the steep slope to a point where it unites with the actual fortification-wall of the Kasr. Here the remains show a wall 8 ft. 6 ins. thick, built up with small basalt building-stones, 1 and 2 ft. square, set in a good white mortar, but which now begins to decay rapidly. . . The construction of the wall is exactly the same as that of the remains found between the city and the hot-baths, along the shore of the lake. The wall now runs in two directions, eastwards and westwards, round the summit; in its western course arriving at the described neck, where the plateau is easily accessible, it ends in a square tower of 23 ft., now fallen to a height of a few yards above the terrain, of the same construction as the wall, and bends nearly to a rectangle southward, and southeastward, showing along its course another square tower; from here . . . the wall . . . winds round the natural construction of the mount until it joins the other half, which in a similar way followed the eastern and northeastern slopes." This wall sur-

rounding the hill, called *Kasr bint el Melek*, is 1,040 yards long, and was the fortress or acropolis of Herod, destroyed by Josephus. Few ruins remain within this fortress: they are (1) a large heap of hewn stones and some basalt columns, occupying the summit; (2) a square subterranean building, 26 by 23 ft., with remains of plastering and a projecting pillar, probably of a former vault; (3) a circular basin; both probably used for water-supply; (4) a third square building, 49 by 23 ft., of strong masonry.

*City and its wall.*—"In passing outside of the acropolis-wall to the south, the general city-wall serpentine along a thin neck, separating two *wādies*; at this point were remarked another subterranean square basin and, near by, traces of a building. At the eastern foot of the Kasr the most remarkable ruins of the ancient city are found, among which the recently restored and greatly venerated Mohammedan sanctuary of the Sitt Iskeiney rises. It may be hoped that, in constructing the new road across this field of ancient remains between Tiberias and the baths, most interesting discoveries will appear."

*The road from the city of Tiberias to the hot-baths* is nearly finished. The heap of ruins opened at the construction of the road proved to be, for the greater part, old baths. Roman, Jewish, and Christian sculptured architectural fragments have been brought to light.—*Palestine Exploration Fund*, 1887, Oct., pp. 223-24.

**ZIMMĀRĪN** (Galilee). *Baths and tombs.*—On this ancient site antiquities of interest are daily brought to light. "On the slope between the actual *Khirbet Zimmārīn* and the S. W. summit was discovered a large building, with remains of arcades, small and large rooms, paved partly with mosaic, partly with marble-plates. The walls, built of large hewn stones of 2 ft. and 2 ft. 5 ins. in length, are set in mortar." It seems to be a bath. Near it, several capitals of Korinthian and Ionic style, roughly sculptured, were brought to light. A cross fills the space between the Ionic volutes. This and other signs point to the Byzantine period for the construction of these baths.

A number of sepulchral caves have also been opened. They generally lie on the slopes of the mountain, having, as entrances, square openings the upper part of which is slightly arched. The interior of these caves consists of square rooms, the sides of which generally show 3 to 4 koka, the end-wall of each having two loculi. Each grave contained human remains, ornaments, such as bronze armlets, utensils of various kinds, and glass vessels. One of the glass lachrymatories of hexagonal form has a handle like a pitcher; another, a double lachrymatory, is strengthened by an inlaid spiral silver wire. Basaltic and marble mortars for pounding spices have also been found. As in some of these cases Jewish and in others Christian emblems are found, it is presumed that the nekropolis was used for both religions.—*Pal. Explor. Fund*, 1887, Oct., pp. 221-23.

## PHENICIA.

**SIDON.**—*Discovery of sarcophagi.*—Further details have been recently published regarding the magnificent sarcophagi whose discovery was announced in the *JOURNAL*, pp. 97–101 and 156–57. No indication of their age or style had been given until a letter from Mr. George Dennis was published in the *London Times* (July 26), in which he attributes the sarcophagi to the third century B. C. The following is an extract: "I have also visited Sidon, to see the Greek sarcophagi recently brought to light there. They are most interesting, as the only proofs we possess that the Greeks in their imitation of nature aimed at truth in color as well as in form. The colors in many instances, when I saw them some weeks ago, were still very vivid, though the more delicate hues were then disappearing, and will probably vanish altogether when exposed to the light of the day. The scenes represented are chiefly combats and lion or boar hunts, though one sarcophagus is unique in showing 18 women in as many compartments in various attitudes of mourning. One of the hunting scenes betrays an undoubted imitation of a portion of the Parthenon frieze, though of manifest inferiority, both as wanting simplicity in the composition and as shirking details which give character. The art is of the third century B. C., but the date can be determined only by the character, for there are no inscriptions. Great freedom but confused composition mark the Decadence. But, as specimens of Greek polychromy, these are most valuable monuments. As no marble is to be found in Syria, they may be the work of Rhodian artists, and imported from the island."

Hamdi Bey, director of the Museum at Constantinople and Mr. D. Baltazzi were at once sent on an archæological mission to Sidon to take charge of the discoveries and continue the excavations. In order to transport these sarcophagi to Constantinople, Hamdi Bey built a road to the sea and drove piles to make a wharf for loading them.

On June 7, a new discovery of great importance was made by Hamdi Bey, by cutting through the wall of one of the previously-discovered chambers. A chamber was found in which at first nothing was remarked but two fine bronze candelabra, each about 5 ft. in height. The flooring of this chamber, however, on examination, proved to consist of a bed of great stones laid with the utmost care. Beneath these was a second bed of stones, and then a third, and under all, thus carefully covered up and hidden away, a great monolith covering an opening in the rock. In this deep chamber was found a splendid anthropoid sarcophagus in black basalt, resembling that of King Eshmunazar, in the Louvre. It contained a mummy and a golden diadem. The lid is covered with hieroglyphs. Toward the feet of the sort of mummy which forms the lid is engraved a Phœnikian inscription

in eight lines, which is translated by M. Renan, as follows: "It is I, Tabnith, Priest of Astarte and King of the Sidonians, son of Eshmûnazar, Priest of Astarte and King of the Sidonians, who rests in this tomb. Oh man, whoever you may be, that shall discover this tomb, open not my burial-chamber, and disturb me not. For there is neither silver nor gold nor any treasure by my side. I rest alone in this tomb. Open not this sepulchre; for such an act is an abomination in the sight of Astarte. If you open my burial-chamber and come to disturb me, may you have no posterity with the living under the sun, and no resting-place with the dead."

The hieroglyphic inscription has been read by Maspéro. Beside transcriptions from the *Book of the Dead*, it contains an indication that the sarcophagus once belonged to a General Penphtah or Panephtah. The sarcophagus appears to have been made in the XXIX or XXX dynasty, and utilized for Tabnith in the early part of the third century B. C. To the south of the room containing this sarcophagus was found a sepulchral chamber divided into two compartments. The western one was undeseccrated and contained a quantity of feminine jewelry: a gold necklace; two gold bracelets of beautiful workmanship; and a bracelet ornamented with colored stones, having in the centre a cat's-eye opal; several anklets, rings, symbolic eyes; and a bronze mirror. Hamdi Bey proposes to recommence operations in the early spring of 1888.—*London Times*, June 21, July 21, 26; *Revue Critique*, 1887, No. 24; *Revue Arch.*, July-Aug., 1887; *Palestine Exploration Fund*, Oct. 1887.

M. HALÉVY, the Orientalist, member of the French Institute, has arrived at Constantinople for the purpose of inspecting the lately found Sidon inscriptions, which have been transferred to the Imperial Museum. The Sultan has given 2,000*l.* from his privy purse for a new kiosk to house these antiquities.—*Athenæum*, Sept. 17.

#### MESOPOTAMIA.

*The brick columnar-pier invented by the Babylonian artists.*—It has been considered that in the massive constructions of the ancient Babylonians the knowledge and use of supports were wanting. In 1881, M. de Sarzec discovered at Telloh, not in the palace but in another part of the ruins, a remarkable pier composed by the union of four circular columns. This is very important for the history of ancient architecture. The pier is built of circular, triangular, or semi-circular bricks, whose *appareil* is masterly. The inscriptions on these bricks contain two lines more than the ordinary ones of Gudea, and these supplementary lines mention a new construction of this *paténi*, supposed to be a place where decisions or oracles were given, and forming part of the sanctuary of the great local divinity *Nin-Ghireu*, who has been identified with the Assyrian *Ninip*. It is described as being

made of cedar-wood, a fact confirmed by finding in the excavations a certain number of fragments of this wood. M. de Sarzec found two other similar piers, preceded by a broad platform with two steps, indicating a monumental entrance.

On March 25, M. HEUZEY read a paper on this discovery before the *Académie des Inscriptions et Belles-Lettres*, comparing the above-mentioned entrance-piers with certain details of Jewish architecture, such as the two columns at the entrance of the temple of Jerusalem; the Porch of Judgment, with a cedar-ceiling, in Solomon's palace; *etc.* In regard to the shape of the piers, he recalled the Egyptian columns representing a quadruple lotus-stem, and the grouped piers of mediæval churches. These comparisons give the idea of a far more highly developed architectural science in Babylonia than could have been supposed.—*Revue Arch.*, 1887, pp. 356-57.

**SIPPARA.**—*Tablets from the Temple of Šamaš.*—A collection of Babylonian antiquities of great interest is at the present time in the hands of a private collector in England. It consists of a series of about 300 inscribed terracotta tablets relating to the revenues and tithes of one of the most ancient of the Babylonian temples at Sippara, dedicated to the Sun-god. In the work of exploration carried on at Sippara by Mr. Hormuzd Rassam, large numbers of inscribed stones and terracotta cylinders and over 20,000 inscribed tablets were obtained from the chambers of this vast edifice and were deposited in the British Museum. These monuments vary in date from B. C. 3800 to B. C. 300, and represent every class of literature, sacred and secular. On the return of Mr. Rassam to England, native overseers were retained on the site for a short time, but were last year removed. Arab antiquity-hunters from Baghdad then commenced their irregular diggings on the site, and the collection which has just reached England was thus obtained. While regretting that the recovery of those records and the excavation of so important a site should be due to so unscientific a source, the new collection will be welcome to all students, as several of the inscriptions are of great importance. The majority of the tablets relate to the collection of the revenues of the temple, which were derived from tithes and dues imposed on corn and dates, as well as contributions from pious donors. In addition to these sources of revenue, large grants of land had from time to time been made to the temple by kings and others, and were farmed, like the Wakif estates of the Mahomedan mosques or the glebe lands of the English Church. Thus, we find that, in the twelfth century before the Christian era, the king gave to the temple "a farm adjoining the city of Al-Essu (New Town), which is within Babylon, and placed it in the charge of Ekursumibassi, a priest." The new collection of tablets affords very clear indications of the wealth of the land of Babylonia in the seventh and sixth centuries before the Christian era. Thus, from one tablet we learn that 4,600 sheep

were given to the temple as sheep-dues in one year, the owners being allowed to redeem them on payment of certain sums. In one tablet, 10,000 measures were received in the third year of Nabonidos (B. C. 553); in another, 500 measures from one man. In addition to corn, we find the receipts for quantities of barley, dates and other fruits, oils and honey. The persons paying these dues are gardeners, farmers, boatmen, scribes, weavers, and the master of the camels, and also women, who thus appear to have been taxpayers. The collection of the taxes was appointed to certain persons, and in the reign of Nabonidos the chief-collector was Nabu-sum-iddin, while in Babylon the Egibi-firm were the tax-gatherers. In addition to these receipts for revenues, these tablets mention the reception of various material for the repairs or adornment of the temple. In the eighth year of Nabupalassar (B. C. 616) a quantity of wood and stone was received; in the seventh year of Nebuchadnezzar II (B. C. 547) a quantity of wood, furniture, and bricks; in others, straw and reeds for building purposes; while in the first year of Cambyses (B. C. 529) we have the memorandum of the reception of five minæ worth of cedar and cypress wood. In the reign of Darius we have the entry of 54 shekels of gold, a metal rarely mentioned in these tablets. One of the most interesting features of these tablets is the great care with which the accounts are kept. The names of the payers are entered in full, and sometimes the name of the father and the trade are given. The amount is entered in ruled columns, and separate payments in other columns, the total being given at the foot, and the whole sometimes countersigned by witnesses. Independent of their value as indicating the flourishing condition of the land of Babylonia and the richness of the temples, some of these tablets are of great historical value as connecting links in the chain of documents on which Babylonian and Assyrian chronology is based. Every one of these tablets is dated in month, day, and year of the king's reign when the transaction took place, and they are, therefore, a most valuable aid to the construction of the chronology of the period. The first of these tablets is dated in the tenth year of Kindalanu, the Kinladinos of the Canon of Ptolemy (that is the year B. C. 637), and forms a valuable record of this last of the Assyrian Viceroy-Kings ruling in Babylonia and dependent on the Court of Nineveh. This king's reign of 22 years terminated with the revolt of Nabupalassar and the death of Assurbanipal or Sardanapalos. On the death of the latter king several claimants arose for the Assyrian throne, among others two sons of Assurbanipal—two of these tablets give dates in the reign of the second and third claimants, named Sui-sar-iskun, a name hitherto unknown to us. This name, in the abbreviated form of Sariskun, bears a nearer resemblance to the Sarakos of the list of Berossos, the last king of Assyria. The reign of this king lasted but three years, and terminated with the suc-

cess of the revolt of Nabupalassar. In a tablet dated in the first year of Darius Hystaspes we find the Persian king claiming only the title of "King of Countries," and not the full title of "King of Babylon and Countries," because Babylon was at that time in the hand of Nidintu-Bel, the rebel. These tablets prove very clearly that, great as has been the harvest from the fields of Babylonia, much remains to tempt us to renewed efforts in the work of exploration.—*London Times*, Aug. 9.

#### ASIA MINOR.

**LATE DISCOVERIES.**—The *Levant Herald* speaks of several discoveries. A correspondent (Mr. Calvert) states in a long article that a mollah had by a dream secretly excavated in a tumulus at **CHOBAN TEPESSÉ** (Shepherd's Hill), on the Bali Dagħ, in the Troad. The mollah found a tomb with some ornaments of gold and gold leaf weighing about five ounces, which were recovered for the Crown. It is here Mr. Calvert placed **GERGIS**. A statue has been found near **MANISA** (*Magnesia ad Sipylum*), in Asia Minor, but of late Roman date, and sent to the Constantinople Museum.—*Athenæum*, May 14.

**ASSIM** (Gulf of).—In extracting stones to transport to Constantinople for building purposes, the commandant of the Turkish frigate *Rehberi-Tevfik* discovered the remains of an ancient construction which, on being excavated, turned out to be the ruins of a Greek temple. Some statues and a large number of columns were discovered and placed on board.—*Revue Arch.*, 1887, II, pp. 93-4.

**BUNARBASHI.**—The *Moniteur Oriental* (April 4, 14, 29) reports the finding of some very valuable articles in a grave at Bunarbashi, consisting of a richly ornamented crown with decoration of oak-leaves and fruits, a broad girdle, a long chain, a female head-dress of gold in imitation of roses, plates, and two staves, all made of pure gold. It is expected that this find, which has been sent for examination to Constantinople, will revive the archaeological war about the site of Troy.—*Athenæum*, Aug. 20; *Revue Arch.*, 1887, II, p. 95.

**IASOS** (Karia).—*Ancient Inscriptions.*—Mr. W. R. Paton writes in *The Classical Review* (June, 1887, p. 176): "When I visited Iasos in the month of March, a vessel of the Turkish navy had just left, which had been engaged for some weeks previously in shipping large blocks of marble extracted from the ruins for use in public works at Constantinople. This and other accessible sites in the neighborhood have for many years past furnished their tribute for the dockyard and other constructions of the capital. In order to find suitable stones the captain destroyed a portion of the mediæval wall which surrounds the peninsula, and in the foundations he came across a series of inscribed bases lying on their sides. With a care, which,

had it been exercised by others charged with a similar mission, would have preserved many valuable documents, he had them extracted whole and deposited on board. I trust they are by this time in the Imperial Museum. Some gentlemen in Choulouk obtained copies of these inscriptions, and I presume they are those published by Contoleon in the *Bull. de Corr. Hell.* for March. . . The wall in question is entirely composed of ancient remains; and, were it carefully destroyed, we should probably possess more inscriptions from Iasos than from any site in Turkey."

**KOLOPHON.**—Mr. Schuchhardt published in the *Mittheilungen des d. archäol. Inst.*, 1886, pp. 398–434, the account of an exploration of the ruins of Kolophon, Notion, and Klaros, made by him in conjunction with MM. Kiepert and Paul Wolters.

**LYDIA.**—*French Exploration.*—M. Fontrier's exploration of the plain of the Hermos in Lydia has led to interesting results, as shown by P. Foucart's article in the *Bull. de Corr. Hellén.*, 1887, pp. 79–107 (*cf. Summary*, p. 212), in which his geographical and epigraphic discoveries are given. One of these results has been the identification of the cities of Apollonidea (*Palamont*), Mosteni (*Tsabanissa*), Hyrkanis (*Papasli*), Hierokaisareia (*Sasoba*), and also that of the Lykos with the Gurduk-Tchai. The entire region north of Sardis is thus made perfectly known. M. Radet has determined (*ibid.*, pp. 168–77) the site of the Lydian city Attaleia at *Yenidje-Kewi* (*cf. JOURNAL*, p. 214).—*Revue Arch.*, 1887, II, p. 96.

**MAGNESIA.**—The *Moniteur Oriental* (March 28) announces the discovery, E. of Magnesia, near the statue of Niobe, in the probable ruins of a temple dedicated Μητρί Πλαστήνη, of a number of early sculptures: (1) a marble statue of Aphrodite, almost intact; (2) a bronze statue of the Asiatic divinity Lunus or Mên; (3) a marble statue of Kybele; (4) a basrelief of two little Erotes giving drink to geese; (5) a large bronze (?) candelabrum. All of them have been taken to Constantinople.—*Revue Arch.*, 1887, pp. 96–7.

*Frieze of the Temple of Artemis.*—It is announced that M. Demosthenes Baltazzi has recently discovered, here, fifteen new slabs of the frieze of the temple of Artemis, representing a combat of Greeks and Amazons, the greater part of which were brought over to the Louvre by Texier in 1835.—*Athenæum*, Nov. 5; *Revue Arch.* 1887, II, p. 122.

**MYLASA.**—The ship Assir, which conveyed the newly discovered Sidonian sarcophagi to Constantinople, stopped opposite Mylasa, Karia, where Baltazzi Bey secured two marble statues of the best Greek period. They had been bought for the Louvre for several thousand francs, but the transaction was broken off on account of the difficulties of transportation. From the port Iasos a short time since some blocks of stone from an old wall had been brought to Constantinople for building purposes; but, when it was discovered that they contained 140 interesting Greek inscriptions, they were seized

by the Government. Baltazzi Bey took advantage of the ship's stopping at Iasos to reconnoitre the ruins from which these inscriptions were taken.—*Pul. Explor. Fund*, 1887, Oct., p. 212.

**PERGAMON.**—At the April meeting of the Archæological Society of Berlin, Prof. Bohn gave an account of the results of the third campaign at Pergamon. The most important discovery was that of the ruins of the Royal palace (*cf. JOURNAL*, p. 162). Being on the very summit and guarded by earth-mounds, the remains found are few: its famous mosaic pavements were spoken of in antiquity.—*Berl. phil. Woch.*, 1887, No. 27.

#### KYPROS.

Professor SAYCE and Mr. FRANCIS PERCIVAL will leave England next week for Kypros, where they intend to spend a month in archæological researches.—*Academy*, Nov. 19.

*Discoveries at Arsinoe.*—The many important antiquities discovered at Arsinoe, and already mentioned on pp. 163-64, were sold in May at the Hotel Drouet in Paris, bringing high prices. On this occasion, M. Reinach (*Revue Arch.*, II, pp. 87-89) gives a careful description of them.

**IDALION=DALI** (near).—*Phœnikian Inscription.*—On pp. 164-65 of the *JOURNAL*, the discovery of this inscription was spoken of and a first reading given. A scientific study of this inscription was read before the *Acad. des Insc. et Belles-Lettres* (April 6) by M. Phillippe Berger. It is at present built into the walls of the church Hagios Giorgios, and consists of a single line, 1.20 m. in length. It is the dedication of a metal tank, offered to the goddess Anath by a king of Kition. The most important difference in the reading is, that the name of the king seems to be Baalmelek instead of Baalram. The translation of M. Berger is as follows: "In the . . . day of the month of Merpaim, in the third year of the reign of Baalmelek, King of Kition and Idalion, son of King Azbaal, King of Kition and Idalion, son of King Baalmelek, King of Kition, this is the tank which Baalmelek, King of Kition and Idalion, son of King Azbaal, King of Kition and Idalion, son of King Baalmelek, King of Kition, has dedicated to the goddess Anath; may she bless him."—*Revue Critique*, 1887, No. 16.

#### EUROPE.

##### GREECE.

**AMORGOS** (island of).—*Prehistoric nekropoleis.*—An article by Dümmler, in the *Mith. des d. Instit.*, 1886, pp. 15-46, calls attention to the pre-Hellenic nekropoleis of this island, in whose tombs of marble slabs the bodies seemed to have been buried doubled-up. The obsidian tools and the rude

pottery recalling the types of Hissarlik, Tiryns, and Mykenai, the fibulæ, bronze poinards, marble caps, amulets, and pearls, etc., the small flat marble idols (sign of pre-Hellenic population through the Archipelago) indicate to Dümmler that the civilization of the Kyklades is intermediary between that of Hissarlik and that of Mykenai, and belongs to the Leleges, who were subdued by the Karians (who founded Mykenai), and thus serve as the connecting link between the barbarous remains of Hissarlik and the culture of Mykenai.

**ATTIKA.**—*Archaic Attic Statue.*—At a recent meeting of the *Acad. des Ins. et Belles-Lettres*, M. Collignon called attention to an archaic Attic statue whose fragments have lately been purchased by the Louvre. It represents a naked standing male figure, with hands clasped, of a type like that of the series to which the "Apollon of Tenea" belongs, but which is new in Attic sculpture. According to M. Collignon, it may have rested on a base similar to many Attic funerary monuments which probably supported, not stelai with bas-reliefs, but statues.—*Revue Critique*, 1887, No. 18.

**PROF. MILCHHÖFER'S DISCOVERIES IN ATTIKA.**—In view of the text which he is preparing for the *Karten von Attika*, Prof. Milchhöfer has made careful researches throughout Attika for ancient inscriptions of topographical interest. He has not only succeeded in naming with certainty a large number of ancient Demes, but among his discoveries have been many sculptures of the greatest interest. He has found rich material in the abandoned and ruined chapels. Among the objects discovered by him was the interesting pedestal of a statue from Kropeia, described on p. 176 of our JOURNAL.—*Berl. phil. Woch.*, 1887, No. 18.

*An archaic domical tomb.*—A letter from Prof. Milchhöfer, published in the *Berl. phil. Woch.* of June 11 (No. 24), gives one of his latest discoveries. "Near Thorikos, on the West coast, at a point where I have excavated in vain, there is, on the saddle between the high pointed hill 'Viglaturri' and a neighboring lower hill on the north, a high tumulus (marked as such even on the still unpublished map of Laurion of Captain von Bernhardt); its circumference is about 150 of my paces. The hill is pierced in three places, and one can look into it by an artificially hollowed space at the north end. This appears to be a kind of pointed-arched gallery of primitive construction in which the flat slabs of limestone (rather rough and not large) are arranged so as to approach as they rise and then join at the summit. The northern end is rounded off in apsidal fashion, the southern end is not covered. Though evidently high, the interior is filled in with rubbish and stones so that the original height cannot even be approximately determined. It still measures 2½ metres; at this height the interior, which must grow far wider below, is hardly more than two metres wide. The length from north to south equalled about 20 of my paces. Towards the middle the construction is somewhat crushed in by the weight of the hill.

"There is no analogous construction to this in Greece. It reminds one of some tombs in Etruria, especially the Regulini-Galassi. The pointed style is repeated, though in later and more artistic form with regularly cut stones, in Thorikos itself at the back of the theatre.

"I have urged the clearing out of the interior on Dr. Schliemann and the general Ephor of Antiquities, Kavvadias."

*Sanctuary of Dionysos in Ikaria.*—On May 9, as Prof. Milchhöfer was returning from Marathon to Kephisia, he took the road that leads from Vraná to the northeastern declivity of Mt. Pentelikon. At its foot lies the place called *Dionysos*, now in the midst of pine woods. There are here the ruins of a church of remarkable ground-plan with remains of a small fore-court, a square wide portico with unsymmetrical door, having in its centre a large marble urn, then a sanctuary with a single large apse. Some beautiful Byzantine ornamented slabs, either lying about or built in, show that a still earlier and probably larger church stood on this site. The tolerably well-preserved walls are almost entirely built of ancient blocks of Pentelic marble, generally of large dimensions, taken from some ancient circular construction; others from the jambs and supports of the doors; others lie about. The largest, once 2.80 met. long, bears the inscription in large letters, Αἰνὰς Ξάνθιππος Ξανθίδης νικήσας ἀνέθεσεν (C. I. G., 237). It is the epistyle-beam of a large choregic monument. A similar stone, still 1.67 met. long, bears the letters EYT █ | KAIT █. The circular building from which came the stones of the apse call to mind a choregic monument like that of Lysikrates in Athens. The remains of an altar and a number of bases with hollows for votive offerings show that a famous sanctuary stood here. Besides Athens, Eleusis, and the Temple of Sunion, there is no ancient centre of worship which showed such considerable remains before any excavations.

That the sanctuary was of Dionysos is shown by the name of the site, and is confirmed by an inscription in letters of the IV cent. B. C.: Κηφίσιος Τιμάρ(χου?) | Ἰκαριεύς | εὐχόμενος ἀνέθηκε | τῷ Διονύσῳ. A monument of such importance—as is shown by the remains—cannot be unknown to fame. Prof. Milchhöfer considers the site to be without doubt that of Ikaria, the Demos of Ikarios, where the god first visited, and he brings forward various proofs of the fact. Leake placed Ikaria in this neighborhood.—*Berl. phil. Woch.*, 1887, No. 25.

**ATHENS.—EXCAVATIONS ON THE AKROPOLIS.**—The following archaic marble sculptures have recently come to light on the Akropolis: a statue without head or ends of feet, more than life-size; another, life-size figure without head, of polished marble; an indeterminable statue; the upper half a statue belonging to the earliest style of art; a small head of archaic style; bases of columns which served as supports of statues. Besides, there were

found two bronze statuettes of Athena about 25 centim. high (?) of beautiful execution. According to the *Ἑστία* (Δελτίον 541 of May 10/22) one of these, found near the Erechtheion, represents Athena Promachos, and is evidently that described on p. 169, though there described as 35 and not 25 centim. high. The figure wears a long robe, girdle and crested helmet; the right hand is raised as if to hurl a spear, the left carries a shield with which she protects herself. The period is pre-Pheidian.—*Ἑβδομάς*, 1887, No. 15, May 9 (21).

Among discoveries made during the year are (1) a male bearded bronze head of archaic style and great value, and (2) some inscriptions bearing the names of two famous artists, Archermos of Chios and Onatas of Aigina (cf. Professor Merriam's paper, p. 315).

*Pelasgic remains on the Akropolis.*—North of the Erechtheion there have been found some vases of Mykenaiian style, and remains of houses similar to those of Mykenai and Tiryns. The importance of this discovery for the history and topography of the Akropolis is evident: these are remains of the Pelasgic period, when the Akropolis was not a sacred spot but was occupied by dwelling-houses.—Δελτίον τ. Ἑστ., No. 530.

The design is to continue the excavations till the whole surface of the Akropolis has been investigated to the bed-rock.

*Pelasgic approach to the Akropolis.*—Just east of the Erechtheion a discovery has been made, during the summer, which is of great importance to the early history of the height. This is a Pelasgic approach to the citadel, hitherto unsuspected, somewhat like that at Mykenai on the N. E. side of the hill. Two low walls of the Pelasgic type run northward inclosing a narrow passage which gradually enlarges and slopes downward by an easy descent till it approaches the wall of the Akropolis; then they turn abruptly to the east and the passage falls by a quick descent, part of the way by steps, and partly through a cutting in the rock, till at a considerable depth it emerges from the present wall where the latter has turned to the S. E. The low wall on the east side of the passage is continued for some distance eastward from the angle, and may have inclosed the ancient palace on the hill. The so-called Themistoklean wall of the Akropolis blocked up this Pelasgic approach entirely; and the part within appears to have been covered in during the levelling process that followed the construction of that wall.

*Archaic male statue.*—The wall itself was here composed of a great variety of material, large and small stones, a portion of a small column, etc. Embedded in these, near the bottom, was found an archaic male statue of white marble in so good a state of preservation that even the polish is visible in some parts, though the breast is deeply corroded in places. It lacks the head, a great part of the arms, and the legs from

the knees. The shoulders are broad and square, the waist and hips narrow; and, while archaic, it bears much of the charm of the later stages of development. It now lies on its back in the Akropolis Museum.

*The Pelasgic entrance* makes the third which has now been discovered within the walls of the Akropolis on the north side. The two others are west of the Erechtheion, one the long-known staircase leading to the Grotto of Agrauros (see *News*, p. 169), and the other a short distance to the west of this in the angle of the same bastion: this came to light last winter. To the east of the Pelasgic approach, the rock has been laid bare for some distance along the wall, and several capitals, drums of columns, and other architectural members have appeared in the wall and beside it. They are of poros stone and belong to the same epoch as others already known, imbedded in the wall. Some maintain that they belong to the old temple on the site of the present Parthenon, and others, to the complex of walls adjacent to the Erechtheion on the south. Some show very plain indications of having suffered from fire.

*The building at the S. E. corner of the Akropolis*, long known as the Chalkotheke, a name now transferred to the diagonally opposite side of the plateau near the Propylaea, has been completely excavated, and its fine walls laid bare to the bed-rock. Nothing was found to determine the character of the structure, so that it still remains a problem. But a head, smaller than life, was unearthed, together with many potsherds and a few bits of bronze. The head is in a remarkably good state of preservation (even to the nose), and represents a male, with hair arranged in two long braids crossing each other behind and brought up over the front, but there hidden by the hair brought down in all directions from the crown. The hair and eyebrows are painted a golden hue, and the pupils of the eyes dark, with a line of dark red under the edge of the lids. The lips are colored red; the eyes quite natural; and the mouth, while possessing a short upper lip, has passed beyond the typical archaic smile. Indeed, if the head is pre-Persian, it must belong to the latter part of this period, and is one of the most pleasing yet known. Adjacent to the north wall of the structure, where this head was found, a part of the old Pelasgic wall was uncovered, forming the northeast defense in the earliest days. It is built of large rocks of Akropolis-stone, without any attempt to fit them closely, and gives one the best idea of the old fortification that can be obtained on the hill. In the northeast corner of the walls were unearthed the substructions of a small building composed of very diverse materials, among them a plinth of poros stone about a yard square and a foot and a half thick, set on end, the inner face bearing the remains of a portion of foot and the traces of another upon a piece of marble let into the plinth and fixed with lead. The foot, which is preserved as far as the instep,

from the tips of the toes, is of excellent workmanship and well proportioned. On the upper edge of the plinth is an inscription in the Attic alphabet, running across from one edge to the other, reading *δνβος: ἀνέθηκεν: ὁ Πάλου.*

The closed H of this inscription and the archaic form of the other letters would place it in the first half of the VI century B. C. or earlier, while the impression produced by the foot is of something later: one of those charming paradoxes of archæology.

About 40 feet east of the steps of the Parthenon, a platform had been uncovered, composed of large blocks of Peiræis stone, originally, as it would seem, two layers thick. The supposition that this was the foundation for the round temple of Rome and Augustus, a block of whose inscribed architrave lies close by, seems reasonable. A portion of this platform is to be removed in order to examine the mass of *débris* upon which it rests.

ADDITIONS TO THE CENTRAL MUSEUM.—During the last months of 1886, the following objects were added to the Museum. (1) The most important statues discovered at Epidauros, including seven statues and one basrelief of Asklepios; four statues of Aphrodite; three statuettes, each, of Athena and Hygieia; four of Epheboi; a number of basreliefs with Asklepios, Hygieia, etc.: (2) a tombstone with inscription and a basrelief from under the S. wall of the Akropolis: (3) a funeral stele with inscription and a basrelief from Sepolia: (4) a fine youthful head from Pharsala. The following arrived during Jan.-Feb. 1887: (1) a fine relief representing a naked Ephebos in a chariot driven by a woman, from the Amphiaræon: (2) another, from the same site, representing a sacrificial procession: (3) the interesting bases found by Professor Milchhöfer at Kropeia.—*Revue Arch.*, 1887, II, pp. 71, 73, gives a full list and description.

BRITISH SCHOOL.—The Earl of Carnarvon presided over the first annual meeting of the subscribers to this School, held June 6 in the rooms of the Society in London. Valuable gifts of books have been received from the delegates of the Oxford University Press, from the Syndics of the Cambridge Press, and from many private publishers, including Messrs. Bentley, Bell, Macmillan, Murray, Kegan Paul and Trench, and Messrs. Calvary & Co., of Berlin. Some private individuals have also made valuable gifts to the library, and it is hoped that their example may be widely followed. The committee have expended a sum not far short of £250 upon the purchase of the books which it was considered most important for the school to possess. The appeals for aid made last year after the meeting of subscribers in October did not produce very much result. The new donations amounted to no more than £115; new annual subscriptions were promised to the amount of £70.15s. a year. Donations toward the establishment of a capital-fund or annual subscriptions will be received by the hon. treasurer, Mr. Walter Leaf, Old Change, E. C. As Mr. Penrose's suc-

cessor, the committee have been fortunate in securing, for two years at any rate, the services of Mr. Ernest Gardner, who is a thoroughly trained archæologist, and has had the great advantage of working under Mr. Penrose as a student during the past season, so that he will take up the work with full knowledge of what is required. It is proposed next session to provide board and lodgings at a moderate rate in the school building for a limited number of students. Information upon this point may be obtained from the hon. secretary, Mr. George Macmillan, 29, Bedford-street, Covent-garden, London, W. C., to whom all applications for admission to the school should be addressed.—*London Times*, June 7.

**BARDARION** (Thessaly).—*Early Roman Sarcophagus*.—Near this place a marble sarcophagus has been found, covered on all sides with fine reliefs: on the front are a man and woman surrounded and accompanied by Cupids: on the back is a man with two garlands and, close by, two eagles and lion-heads: on either end are sphinxes. Inside were found a number of gold ornaments and a coin. The latter belongs to the pre-Christian Roman period.—*Δελτίον τῆς Ἑστίας*, March 8 (20).

**KEPHALLENIA**.—The Museum and Library at Argostoli founded by Archbishop Kalligas has been enriched by a collection of 109 gold, 876 silver and 1,597 copper coins found at Same, Kephallenia, and presented by Dr. Milearesis.—*Berl. phil. Woch.*, Oct. 22.

**KYTHERA**.—Dr. SCHLIEMANN returned to Athens, November 27th, from Kerigo (anc. Kythera), where he attained his main object of discovering the ancient temple of Aphrodite mentioned by Homer and Herodotos; but except some Cyclopean walls there are no vestiges of antiquity.—*Athenæum*, Dec. 10.

**MANTINEIA**.—The excavations at Mantinea undertaken by the French School and directed by M. Fougères have been most successful. The plan of the town-walls with the gates and towers has been drawn up; the theatre and the plan of its *scena* made out; and remains of buildings discovered near the theatre; also the site of the temple of Hera, mentioned by Pausanias. The position of the Agora has been determined and the porches which surround it brought to light. A street leading from the centre of the city to the southern gate, paved with large blocks worn by cart-wheels, has been recognized. There have been found, architectural fragments, including a series of Doric capitals of various periods; marble sculptures; bronzes; terracottas; stamped bricks; inscribed tesserae; and several interesting inscriptions. Among the sculptures may be mentioned an archaic stele on which is represented a female figure almost life-size, holding a flower (?) in her right hand; also three marble panels containing nine figures in relief. The subject represented is the musical contest of Apollon with the Satyr Marsyas. Six Muses accompany Apollon, and

hold in their hands musical instruments and manuscripts. The last panel containing the three remaining Muses has not yet been recovered. These are thought to be the reliefs spoken of by Pausanias (VIII.9.1) as decorating the pedestal of the group of Leto and her children. They will be published in the *Bulletin de Correspondance Hellénique*. Of the inscriptions found, one contains an archaic legal text in the Arcadian dialect; one, a list of the companions of Philopoimen, and a third, of the Roman period, relates the liberality of Epigonos who enriched the Agora and added the beautiful porticos.—*Courier de l'Art*, Nov. 4; *Chronique des Arts*, Nov. 19.

**MYKENAI.**—*Akropolis*.—The exploration of the summit of the akropolis has brought to light a series of walls which, by their arrangement, construction, and colored decoration, recall those of the royal palace at Tiryns. Diggings were also made on a lower level near a large tower with polygonal walls. Many walls of the Roman period were brought to light at this place. Several precious objects were picked up, notably a bronze female statuette, with chiton and diploidion, of archaic workmanship (0.093 m. high). M. Tzountas is in charge of the excavations.—*Revue Arch.*, 1887, II, p. 76.

**OROPUS.**—*Theatre*.—In July and August, 1886, the clearing of the *scena* of the theatre near the sanctuary of Amphiaraos was finished. The wall of the *hyposcœnion* is adorned with ten Doric half-columns whose lower portion is in some places preserved; around the orchestra were found seats with inscriptions. The *scena* is even better preserved than at Epidauros. The architraves of the upper colonnade bear inscriptions important for the terminology of theatre-architecture.—*Revue Arch.*, 1887, II, p. 76.

**SIKYON.**—*Excavations by the American School*.—During the spring, excavations have been carried on at Sikyon under the auspices of the American School, interesting from the fact that they were the first systematic excavations made there. Numerous ruins still exist upon the site, consisting of the theatre; the stadium; considerable remains of a large brick structure, probably Roman baths; many foundations of buildings; aqueducts cut in the rock; and traces of streets. There are extensive remains of the wall surrounding the akropolis, which was constructed by Demetrios Poliorketes. Fragments of columns also are found in and about the churches of the modern village of Vasiliká. It was thought best to confine the work mainly to the theatre. The chief object was to discover its complete plan; but at the same time it was proposed to do some digging on the foundations of other buildings, for the purpose of identifying, if possible, some of these structures with the temples or other buildings mentioned by Pausanias. Little of importance was accomplished outside of the theatre, finding no inscriptions, and only a piece of marble upon which were the toes of a statue, and an Ionic capital of ordinary stone: but the results of the work in connection

with the theatre are of great archæological value. It was one of the largest in Greece; the plan of its structure can now for the first time be studied.

The plateau upon which Sikyon lay is separated by a rocky declivity into two portions, a larger one nearer the gulf and a smaller one in the rear. The theatre was cut out of this rocky declivity. When excavations were begun, there were to be seen slight traces of the stage-foundations of the stone seats, and two large arches, one on each side of the caven, leading from the outside to the higher rows of seats. Over the orchestra was a layer of earth, from three to nine ft. deep. The excavations have brought to light three main walls belonging to the stage foundations. The one nearest the orchestra is about seventy-two ft. long and three ft. high. At its foot, in front, an ornamental marble border extends nearly its entire length. The blocks composing this border have at the ends the masons' marks, in the form of Greek letters. Upon one of them is one of the inscriptions found. This front wall has three doors in it, the middle one being double. It is evidently of Roman construction, being composed of not very large blocks of stone, and having bricks built in it. The second wall is of a different character from the first. It is made of large blocks of stone, well laid, and is without doubt of Greek construction. Its length is about 48 ft.; its height the same as that of the first wall. It has in it only one door. The third wall is of mixed construction, part being like the first one and part like the second. It has the same length and height as the second wall. In it are two doors. At the distance of about 21 ft. from the east end of the stage a cross-wall extends between the second and third walls at right angles to them. The orchestra has an elliptical form, but the ellipse is not complete. There are five rows of seats cut out of the rock, and fourteen stairways extending upward, dividing the seats into fifteen divisions, or *kerkides*. The front row is of more elaborate construction than the rest, each seat having a back and arms.

The drainage system of the theatre seems to have been elaborate. A deep drain extends around the orchestra to the entrance, having stone bridges opposite the stairways, precisely as in the theatre at Athens. An aqueduct passes from the centre of the orchestra to the stage, and out under the middle door of the first wall. Another extends from the western side of the orchestra to the one just mentioned. In various places earthen pipes were found, which evidently served as drains. Two arches, which afforded entrance and exit to the people in the higher rows of seats, are interesting, as adding another to the very rare examples of Hellenic arches. The old theory that the Greeks did not construct arches until after they came under Roman influence must be abandoned. Another arch of Hellenic construction was found by the Germans at Olympia. That the arches at Sikyon are not Roman is manifest from their construction. There is in them no

trace of mortar or brick. In the dimensions of the blocks and the manner of laying them, the arches are exactly like the portions of the stage walls that must be attributed to the Greeks. In addition to the three main walls of the stage-structure were found two others in the rear, of Roman construction, running parallel to them. A portion of a column, apparently *in situ*, upon the outer wall, would seem to indicate that it was the foundation wall of a colonnade adorning the front of the theatre. In following up the wall last mentioned, was found a structure the nature of which is obscure, though it seems to have been a fountain of somewhat elaborate construction. In front are portions of four columns, still in position, channelled only upon the outer side. Back of the columns, at a distance of about three ft., is a semicircular enclosure, with plastered walls and a smooth floor. A great number of fragments of tiles found within would seem to indicate that the structure was roofed.

The artistic remains found are not of very great value. The most important are: the arm of a statue of more than life-size; a piece of the leg of another statue; the lower part of a draped statue found in the earth covering the stage; numerous architectural fragments, among others an Ionic epistyle of common stone, a Doric epistyle of marble, pieces of Ionic and Doric capitals, and of lion-head waterspouts (some bearing traces of blue and red paint); numerous copper coins having upon them the dove, the well-known symbol of Sikyon; a number of small earthen lamps; two inscriptions, one of the Roman period, incomplete, relating to honors to be bestowed upon certain ambassadors, the other of the Alexandrian period, recording the victories gained in various games by one Kallistratos, the son of Philothales.

A detailed report of the work done at Sikyon, accompanied by a plan of the theatre, and illustrations, will appear in the volume of Papers of the American School for the present year.—*New York Nation*, Aug. 18.

*Recent discoveries: two marble heads and four nekropoleis.*—We have advices from Sikyon, under date of December, which speak of the discovery of two marble heads of good Greek work, which are very important as examples of the famous Sikyonian school of sculpture: they are the first heads found at Sikyon. One was unearthed in the orchestra of the theatre: it was at first thought to be a female, but is concluded to be a Dionysos of the extremely feminine type: the pupils of the eyes are painted red, the hair golden. The other head was found in the possession of a peasant: it is half life-size, and the face is excellent.

Four different nekropoleis have been found on the slopes of the hill, and will probably yield good results.

*THASOS (Island of).*—*Discoveries by Mr. Bent.*—Mr. Theodore Bent makes the following report on the important excavations he has carried on here.

"During a period of seven weeks I have been engaged in excavating in the island of Thasos on behalf of the Hellenic Society and the British Association, and the results have been satisfactory, more especially in marbles and in inscriptions, of which latter I found about forty. Thasos was independent and a place of considerable importance even down to the later days of the Roman empire, owing probably to the fact that Thasiote marble was in great request in Rome and in Athens at the time of Hadrian. I propose to devote a few remarks to the chief buildings which we dug out, and the principal marbles and inscriptions which came to our hands in the course of our work.

"1. *The Roman Arch.*—About a quarter of a mile from the principal gate of the city, the gate on which the basrelief of Herakles was found, and in a direct line with what must have been the chief street of the city running from west to east, we saw two large stones appearing about 2 ft. above the present soil level; and on digging down a short distance we found a portion of a long inscription which identified the building as a Roman arch erected by the Thasiotes to the honor of the imperial family and to commemorate the victories over the barbarians, who were at that time threatening the outlying provinces of the empire. Its destruction had been complete, and the *débris* lay 10 ft. below the surface, only the four bases on which the arch had rested and the platform joining them remaining in their original position.

"The arch was 54 ft. in length, and consisted of three entrances, the central one being 20 ft. in width; the bases of the two exterior columns were the largest, being 5 ft. 3 in. square, the bases of the inner columns being only 4 ft. 8 in. square. One of the inner columns was intact, and stood 9 ft. 5 in. high, and had a pretty scroll-pattern running down one angle. The whole structure rested on a marble pavement 6 ft. 11 in. wide; capitals decorated on two sides only had adorned these columns, worked with different floral devices in very high relief, with an egg and tongue pattern below. Of these capitals we found the fragments of six. Above these appears to have run, both behind the arch and in front, a very rich frieze, 2 ft. 6 in. wide, in huge blocks of marble ranging from 7 to 10 ft. in length, the top of which was decorated with a deep egg and tongue pattern, and below this in front ran the inscription, 19 ft. 7 in. long, in two lines, and in Greek letters 3 in. deep. The legend is as follows: 'The reverend and great city of Thasos to the greatest and most divine Emperor Cæsar M. Aurelius Antoninus, well deserving of his country, great Bretannikos, great Germanikos— The city of Thasos to Julia Domna— The city of Thasos to the god L. Septimius Severus and to Pertinax.' The inscription to Julia Domna and Severus and Pertinax has the appearance of being added later, as the letters are not so well incised.

"Above this frieze was a projecting cornice, and on the top of this rested a large statue of a man struggling with a lion, doubtless a double allusion to Herakles, the traditional protector of Thasos, and the Roman triumph over the barbarians. We found all the fragments of the body of the man and the lion beneath the *débris* of the arch; but the man's head was missing and the lion's much damaged. The man had his left arm round the lion's neck; his right arm, which is missing, he held up, and doubtless had a weapon in it; he had one knee on the ground and the other leg bent forwards towards the lion: he wore a Makedonian tunic, and evidently had a scabbard by his side; the lion's haunches rested on the ground, the fore-paws being fixed in the man's flesh.

"In front of the two central columns of the arch stood four pedestals, two behind and two before, carrying statues, and with inscriptions. In front of the northern columns nearest to the city, and consequently in the place of honor, stood a prettily adorned pedestal 6 ft. 9 in. high, with an inscription which tells us that the statue which surmounted it was erected by the senate 'to their mother Phloueibia Sabina, the most worthy archpriestess of incomparable ancestors, the first and only lady who had ever received equal honors to those who were in the senate.' The statue we found at the foot of the pedestal, luckily preserved by falling into a bed of sand, so that only the tip of the nose and the right hand were missing; the left hand, which hung by her side, is adorned with a large ring, and the whole body is covered by a gracefully hanging robe; the face is that of a young and lovely woman. Although not resembling statues to the same person, it is highly probable it was erected to the honor of the Empress Sabina, wife of Hadrian; the name Julia is sometimes given to her, but it is more probable that the above is a Greek attempt to spell Fulvia, a name so intimately associated with the imperial family at that time.

"Of the statue which stood on the corresponding pedestal in front of the southern column we only found fragments of drapery of highly inferior artistic merit, and an inscription on the pedestal telling us that it was erected to the 'most worthy archpriestess Memmia Belleia Alexandra, whom the solemn assemblage of the senate designated as mother.' Doubtless she was another of the same imperial family, most probably Julia Mamaea, niece of Septimius Severus and mother of Alexander Severus. The pedestal and inscription are greatly inferior in execution to those below the statue of Sabina. At the back of the arch were two pedestals, around which we also found fragments of statues; but only that on the northern side had an inscription, recording that in honor of a most worthy Macedonian certain most sacred Bacchic rites had been celebrated.

"In the neighborhood of the arch and amongst the *débris* of it we found splendid fragmentary remains of a Doric building of much earlier date. On

one stone was an inscription to Keraunian Zeus, with a thunderbolt underneath it, pointing to a temple in honor of that god having existed in the vicinity of the arch.

"2. *The Theatre* occupied a bend in the hill just inside the walls, and about five hundred feet above the level of the town. The lines of the seats, the semicircle of the orchestra, and the colonnade behind the stage erections were alone visible; and the former two were entirely covered with soil and with a thick growth of bramble, which rendered our work somewhat difficult, and which had created such havoc amongst the seats that it was impossible to follow out the circles. The inhabitants told us that, a few years before, a Turkish ship had removed all the marbles from here which bore any traces of ornamentation, and which appeared above the soil. Commencing at the western edge of the semicircle which bounded the orchestra, we discovered that below the seats, and dividing them from the orchestra, had been a wall of huge marbles, twenty-seven blocks in all, the average size of which was 5 ft. 9 in. high, 4 ft. 8 in. wide, and 10 in. thick. On each of these marbles had been inscribed two large letters, well cut and of a good period, 8 in. high. As some of the blocks were missing we were unable to recover all these letters in their order, but we got sufficient to prove that they did not form part of an inscription running round the orchestra, but doubtless were letters indicating the number of the seats. Along the top of this wall ran iron railings to protect the seats, the front row of which appears to have been so placed that the knees of the spectators would be on a level with the top of the wall. On uncovering the seats we found that names, initials, and letters were cut on all of them. One of the front seats had the letters ΠΕΙΞ, doubtless for the priests, ΙΕΠΕΙΞ; another was the seat of Theodoros, another of Onesimos, another of Herakles. Some of the names were of a much later period, scratched on the top of older ones. One seat had a large *omega*, 2 ft long, cut upon it, whilst its next neighbor had only a tiny *alpha*. All the seats were much worn, and were on an average 1 ft. 4½ in wide, 7 in. deep, and with a groove underneath for the spectator's heels. From the disturbance of the rows through the roots of the brambles it was impossible to trace more than the central passage, which was reached by steps from the orchestra through an opening in the surrounding wall. The διαζώματα were in no way recognizable, and it was impossible to decide how many grades of seats there had been, for the upper part was lost in the dense jungle of fir-trees and brambles. The orchestra and stage fittings had been subjected to serious alterations during the Roman period. Behind the proscenium had run an elegant Doric colonnade with light columns, 2 ft. 9½ in. round, and fifteen flutings supporting the triglyph, 1 ft. 6 in. high, with plain metopes, 1 ft. square; and behind this colonnade were the bases of six massive columns,

which had evidently supported the exterior decorations towards the town, which have altogether disappeared. Underneath the stage buildings, and entered from outside, was a narrow passage 2 ft. 5 in. wide, which opened into the orchestra, and was evidently one of the means of entrance for the spectators. The orchestra was 10 ft. 8 in. below the level of the stage building, which from the colonnade projected into the orchestra 15 ft., and was an erection of Roman date, as was evidenced by pieces of the Doric colonnade being used in its construction. From one extremity of the semicircle to the other was 76 ft., and it appeared as if sloping walls from these extremities to the stage had originally formed part of a longer extension of the circle, which had been reduced to suit later requirements. The diameter of the circle was 74 ft.

"Near the western entrance we found several inscriptions and three bas-reliefs with prayers to Nemesis attached. Two of the figures represent the usual virgin-deity, whilst the third basrelief has three figures—two females with swords in their hands, and the third the Rhamnusian Nemesis, crowned with strange headgear, with wings, scales in one hand, and standing upon a wheel.

"3. *The Temple of Apollo at Alki.*—The marble quarries of Thasos are to the south of the island. At a spot now called Alki by the Thasiotes, and some three hours' distance from the nearest village, are remains of a town of considerable size, built on an isthmus which joins the hilly promontory on which the marble quarries are situated to the land. This town was joined to the capital of the island in ancient times by a road, portions of which have lately come to view owing to the extensive burning of a forest; and about a quarter of an hour's walk from Alki we found a quarter of a mile of this road intact. It is in the bend of a hill, and is built of irregular blocks of marble, one of which is 7 ft. long by 3 ft. thick. These blocks are placed lengthways, so that the roadway is composed of only two blocks, and is of a uniform width of 13 ft. 3 in., and forms a splendid specimen of ancient Hellenic engineering skill. In the town itself, doubtless inhabited by merchants and workmen engaged in the marble trade, we saw traces of many interesting buildings; but as time was limited we devoted our attention solely to one of them, the *débris* of which rested on five grades of steps, the lowest grade coming down to the water's edge, and built of some of the largest blocks of marble I remember to have seen. The block at the northern edge of the lowest grade measured 16 ft. 11 in. in length; it was 5 ft. 3 in. wide, and 2 ft. 4 in. thick; the block at the northern angle of the top grade was 12 ft. long. The remains of the temple which stood on this platform were buried in several feet of earth, and the following is the plan of it as far as we were able to proceed in the time at our disposal. The length of the top grade facing the sea was 54 ft., and 2 ft. 4 in. from the

outer edge we found the foundation of the temple building with a façade of 45 ft. 9 in. The width of the chamber towards the sea was 32 ft. 7 in., and at the southwest corner of this we found a raised platform on which had undoubtedly stood an archaic statue of Apollo, the trunk of which we found at a little distance from the platform. It has fifteen braids of hair down the back, and measures from the neck to below the trefoil-shaped knee-cap 4 ft. 5 in.; round the shoulders it measures 4 ft. 10½ in., and round the waist 3 ft. 4 in. Strength is curiously shown by a rude development of the chest and the leg-sinews, and an inscription to ΔΑΟΣ ΑΠΟΛΛΑ was on the base of the pedestal on which the statue stood. Is this the wolf-god Apollo, or is it simply the dedicator's name? Several inscriptions came to hand on large stones in front of this pedestal—votive tablets from mariners thanking various gods for a good passage, *etc.* There was one to Artemis, 'who gives fair voyages,' from Eutycho the captain, Tychichos the mate, and Jucundus the helmsman of a ship; and another to Sminthian Apollo, 'who gives good voyages,' tells how the offerer had sailed round 'the misty island' (ἀερίην νῆσον), a curious allusion to the old name of Thasos, Ἀερία, which was given in answer to a Delphic response to the early colonists who sought for advice from Apollo, and the god replied, 'Go to the misty island;' and, Thasos appearing to them more misty than the rest, they decided to go there, and called it Ἀερία. Amongst these inscriptions we found also an archaic head and a curious well-cut stone, 3 ft. 1 in. by 1 ft. 3 in., down the front of which was carved a head with long beard in five braids, which seemed as if it had been one side of a seat.

"The wall which divided this outer chamber from a second, was built of huge blocks of marble fastened together with iron rivets set in lead. The first two blocks on the northern side, respectively 12 ft. 2½ in. and 3 ft. 2 in., formed the base of a square-cut pattern which had evidently adorned the whole of this wall of the temple; the entrance was 5 ft. wide, and against it on the southern side stood a long inscription with the names of various Archons, Polemarchs, and *Apologoi*, a peculiar Thasiote name for the *logistai*, or auditors of accounts.

"Close to this was the pedestal of a small statue, no traces of which we found; but about 3 ft. from the wall stood the pedestal of a statue of Athena, with two inscriptions from grateful mariners on it; and near to this we found fragments which appeared to belong to a statue of that goddess. In close proximity to this we found a circular fluted pedestal of archaic date, 6 ft. 2 in. round at the base, 1 ft. 6 in. diameter at the top, 3 ft. 2 in. round the neck, and 3 ft. 5 in. high; it had twenty flutings. On the southern wall of this chamber ran another raised platform, on which we found a small altar to Dionysos, and in the wall behind it was a stone with the inscription, 'The Dionysian sacred herald of love.' This second chamber was 14

ft. 8 in. wide, and the outer-wall formed a curious conglomeration of the old Doric edifice and later Roman alterations. On the central slab were the bases of two Doric columns, 2 ft. 8 in. in diameter, and 6 ft. 6 in. apart. They stood on a platform 3 ft. 1 in. wide; but, to the south, this was continued by a narrower platform, with traces on it of a later colonnade, and before which stood two circular bases of columns of debased art. The wider platform between the Doric bases was covered with names, scribblings, and phallic designs, such as 'Aristogeiton,' 'Simos the gay, the good at heart,' and many others.

"Between the southern wall of the temple and the hill ran a narrow passage, with steps leading down to the sea. On the southern side ran a wall composed of extraordinarily long and narrow blocks of marble, doubtless a facing to the rough rock, the first we uncovered being 11 ft. 5 in. long, 1 ft. 7 in. high, and only 7 in. thick. This passage was 7 ft. 4 in. wide, and at forty feet from the entrance was divided by a wall and door. On one of the stones of the wall of the temple we found an inscription to Poseidon, 'who gives good voyages,' coupled with the names of Asklepios and Pegasos; also another stone, with the word 'Anteros' scribbled in very large letters, and some smaller scribblings.

"Undoubtedly, in the first instance, this temple was dedicated to Apollo, from the archaic statue and inscription; but evidently in later times it was the recognized shrine of many gods, where the mariners who carried the Thasiote marble to other parts placed their votive tablets.

"*Thasiote Tombs.*—One of the natural results of possessing an unlimited supply of marble was that the Thasiotes lavished it to an immense extent on the mausolea and sarcophagi for the reception of their dead: the vast cemetery of the ancient capital of the island must have been perfectly magnificent to behold in the days of its splendor, as an account of slight investigations we made amongst the ruins will testify. On quitting the western wall of the old city, which is still easily traceable, one enters a large plain, bounded on three sides by mountains, on the other by the sea. It roughly forms a parallelogram, two miles in length along the coast, and a mile and a half from the coast to the mountains. The whole of this plain is now covered with olives and brambles, but in ancient times it was covered with massive marble tombs, all erected in straight lines radiating from one point, namely, a gate in the city wall, which is still adorned on the northern side with a fine *stèle*, standing against the wall, 15 feet in height, and decorated in the centre with a handsome basrelief representing a man seated on a chair and a woman playing some instrument which is unfortunately damaged but looks as if it had been a barbiton. This was in all probability the gate of the tombs through which the dead were carried.

"Of these straight lines of tombs I was able to distinguish ten quite dis-

tinctly. The finest tombs appear to have been erected on the two outer lines, namely, the one immediately at the edge of the sea, and the one running along the first spurs of the mountain. Numbers of fine sepulchral monuments, large sarcophagi with long metrical and other inscriptions, have from time to time been brought to light amongst the olive trees, notably, the so-called tomb of Antiphon, built on a small projecting rock, on which was found a figure wearing a tunic of gold, which was unfortunately stolen by a Bulgarian workman in excavating the tomb; and the colossal eagle, which is now in the museum at Bûlâq, was found amongst a nest of these tombs at the edge of a stream which runs through this plain.

"At the end of the line nearest the sea, just at the edge of the mountains and nearly two miles from the town, we were attracted by the *débris* of what proved, on excavation, to have been a handsome mausoleum surrounded by a group of sarcophagi; but, owing to its having been converted into a church in later times and thickly overgrown with brambles, it required much work before we could restore the original plan. On commencing our work at the eastern side, where the ground began to rise towards the mound, we soon came across two huge marble sarcophagi, the lids of which had been broken in, centuries ago, to extract the precious metal which the Thasiotes invariably in some form or another put into their tombs. Vases are extremely rare in Thasos, gold objects being more frequently found; and this is accounted for by their possession on the opposite mainland of the gold-mines in mount Pangaios. One of the sarcophagi had no inscription; but the other, which was 7 feet long by 3 feet 4 inches deep, and which was covered by a lid adorned at each corner with a boss, 1 foot 5 inches high, and a roof sloping up to the same elevation as the bosses, bore the following inscriptions:

ΦΙΛΟΥΜΑΙΝΗ ΚΩΜΕΙΔΟΣ ΠΡΟΣΦΙΛΗΣ ΧΑΙΡΕ  
ΤΡΥΓΗΤΙΟΝ ΚΩΜΙΔΟΣ ΠΡΟΣΦΙΛΗΣ ΧΑΙΡΕ

"These inscriptions are interesting from the fact that *φιλουμαίνη* is spelt, instead of *φιλουμένη*, which goes far to prove that *αι* in those days as now was pronounced as *ε*, and the use of the diphthong suggests that then, as now, the long syllable followed the accent; and again we have *αι* and *ι* similarly confounded, which would make it appear that they were pronounced then, as now, similarly. On many Thasiote tombs *χαίρε* is spelt *χίρε*, proving incontestably that in those days the pronunciation was the same as it is in modern Greek.

"On pursuing our work, we found the fragments of another pretty little sarcophagus, adorned at one corner with a female figure with wings, holding in her hand a crown; above it and at each of the four corners were ram-heads, and a garland ran all round, supported in the front by the figure of a naked child. Close to this we found fragments of another small

sarcophagus, also adorned with ram-heads and a garland, and carrying the inscription: ΕΡΜΗΣ ΘΕΟΔΩΡΟΥ ΤΡΟΣΦΙΛΗΣ ΧΑΙΡΕ.

"The large mausoleum itself, around which these tombs were grouped, stood on a platform approached by five grades of marble steps, the platform being 27 ft. long by 11½ ft. wide at the edge of the highest grade.

"In the lowest grade of steps we found an incision had been made and a large sarcophagus inserted underneath the building; this was approached by a narrow passage between two walls, 18 ft. long; without destroying the whole superstructure we could not uncover the sarcophagus so as to see if it had an inscription on it, and, as we saw that it had been opened at the side to extract whatever of value it had contained, we deemed it best to leave it as it was. Evidently this was the tomb of the individual in whose honor the mausoleum had been erected, for it was the only sarcophagus we could find actually under the building.

"On the top of the platform there had once stood a very handsome and massive building, the lower chamber of which was formed of huge blocks of marble, with a corniced edge on the side facing the sea, namely that 27 ft. long. Apparently there had been only two blocks of marble on this side, one of which bore the inscription, ΦΙΛΟΦ | ΦΙΛΟ, in letters of a good period, suggesting that the name of the man in whose honor the mausoleum had been erected was one Philophron, son of Philophron. On the other large block we found a long metrical inscription, evidently added at a later date.

"Concerning the building which surmounted this lower chamber, we can of course offer only speculations from the nature of the fragments of marble columns and decorations found amongst the ruins. Apparently, huge stones with corniced edges formed the roof of this lower chamber, on the top of which stood an open Doric building supported by columns, of which we found many drums; these columns had been very fine, 2 ft. 7 in. in diameter at the base, and with 22 flutings; the drums had been fastened together by neatly-made iron rivets soldered into the marble with lead.

"We also found the body of a well-formed marble lion, with traces of a mane down the back, and with a girth of 4 feet 1 inch. This fragment of the lion was found on the side towards the sea, and doubtless there had been another or others at the corners of the building.

"A close examination of this one mausoleum enabled us to form some faint idea of the magnificent effect which this plain of tombs by the sea-shore must have afforded in the days of Thasiote splendor. Amongst the thickly-growing brambles are many indications of mausolea of equal magnificence, the excavation of which we did not undertake. The whole plain in which is the olive-plantation is covered with 12 feet of soil above the original level on which the tombs stood, making it of course a matter of impossibility to recover the form and dimensions of many of them.

"Tombs of the poorer class seem to have been altogether excluded from this plain, and we found many of these in lines running up a narrow valley at the back of the town. Most of them consisted of small terracotta sarcophagi about 3 feet square, some decorated with a pretty pattern, others perfectly plain, and each having in it nothing but a small vase of rude workmanship. The presence of golden ornaments in a few of the tombs which have lately been found is sufficient to account for the general rifling of them before the fall of earth had covered them, and before certain erections of later Roman and Byzantine date had been constructed above them.

"The marble-quarries of Thasos, as I have said, were situated to the south of the island, and, on a narrow tongue of land joining the marble promontory to the island, was situated a town which seems to have been the second in importance in the island, and probably wholly devoted to the commerce in marble. Here we found, buried in the sand by the shore, other tombs and fragments of beautifully-worked sarcophagi; one lid had bosses 1 foot 10 inches wide by 1 foot 3 inches high, decorated with female heads; another had the bosses decorated with wreaths of flowers, and the sloping roofs of the lids were occasionally decorated with well-worked diaper patterns. In the centre of the village stands a very large sarcophagus with a metrical inscription, which M. Perrot published in his monograph on Thasos; and on a tomb we dug up in the sand we found an inscription to the memory of a lady: the tomb was 6 feet 1 inch long by 2 feet 8 inches wide, and edged with a neat border.

"On the top of the hill overlooking the sea we found, amongst broken sarcophagi, the fragments of several inscriptions—some plain, some metrical. A thorough excavation of this spot would undoubtedly bring to light interesting and varied devices in marble sarcophagi; the ground is full of them, but owing to the accumulation of soil they are at a great depth."—J. T. BENT in *The Athenæum*, June 25, July 23; *Classical Review*, July.

**TIRYNS.**—A special meeting of the Hellenic Society was held in July of last year to discuss the antiquity of the remains at Tiryns and Mykenai, when Mr. Penrose raised various points that seemed to him to tell against their prehistoric character. Dr. Dörpfeld, in reply, invited Mr. Penrose, or any other archæologist, to examine the site with him, and undertook to dispel by such examination all doubts as to the soundness of his (Dr. Dörpfeld's) theory. Mr. Penrose, who has recently finished his duties as Director of the British School at Athens, accepted this challenge, and the following letter will be of great interest to all who have followed the discussion so far:—

Oct. 8, 1887.

*My dear Mr. Leaf,*—I have just returned from an expedition to Næuplia, whence I visited Tiryns and Mykenai and also Epidauros. At Tiryns and

Mykenai I had the advantage of the company of Dr. Dörpfeld. This visit enabled me to clear up certain doubts which a previous hurried visit in the spring of 1886 had led me to entertain relative to the great antiquity of the dwelling-house, called the palace, of Tiryns and the tombs at Mykenai. The suspicious points were sufficiently brought forward in the discussion which took place in the summer of 1886. My late visit convinced me that they were all capable of explanation, and that both at Tiryns and at Mykenai the parallel antiquity of Dr. Schliemann's recent discoveries and the great Pelasgic works can be established. An important point in the controversy related to the use of the stone-saw. It was argued that the evidence of this instrument on some of the stones in the palace proved it of later date than the walls of the citadel; but I found that this argument broke down, for there were evident marks of its use on the pillars of the great gateways both at Tiryns and Mykenai.

Another very natural difficulty arose from the badness of the construction of the palace walls and the smallness of the stones used. The walls are certainly more carelessly built than one would have expected, and are generally composed of small stones; but there are exceptions, and one remarkable stone, which forms the floor of the bath-room, would have required as difficult handling as any of the stones of the fortress. There is also a harmony both in direction and extent, as marked by special quoins and returns, between the external walls and those of the palace, which very strongly points out their contemporary construction. But perhaps the strongest argument of all comes from the dwelling-house or palace very recently discovered on the summit of the akropolis of Mykenai. There are the same features almost exactly as at Tiryns, the same and even clearer evidence of destruction by fire; and upon the top of the ruins of this ancient building are the foundations of a regular Doric temple, which shows by the character of its architecture that it must have been as old as 450 B. C. Moreover, between the foundations of the temple and the remains of the palace walls some ruder dwellings had been constructed, which necessarily send back the date of the original palace considerably further. A point which at first seemed to offer much difficulty was the evidence of burnt bricks and mortar in the walls at Tiryns. I could, however, find no kiln-burnt bricks in the walls of the original structure—there are some walls clearly of later date, which interfere with the proper ground plan—and the mortar admits of the explanation that it was formed by a natural slaking of limestone calcined by a conflagration.

As to the antiquity of the tombs at Mykenai, the only argument against it is the badness of the building, which, if disproved as an argument at Tiryns, fails here also. But one proof suffices to establish their great age. The wall of the citadel has been deflected into a curve to conform to the

line of the conical mound, so that this Pelasgic work must have been either contemporary, or else the tombs are older still, and existed as an extramural cemetery before that portion of the citadel was enclosed.—*Athenæum*, Nov. 12. Cf. W. J. STILLMAN's letter to S. Reinach, *Revue Arch.*, July-Aug., 1887, pp. 76-78.

**VOLO** (near).—*Domical Tomb at Dimenion or Dimini*.—With regard to the early domical tomb, whose discovery was mentioned on p. 178, the following further particulars may be given. It resembles that of Menidi: the tholos is somewhat higher, measuring 9 met. with a diameter of 8.50 met. (instead of 8.35 at Menidi). The method of construction, with small stones superposed without mortar, is identical in both. The interior was filled in from above. The corridor or *dromos*, 13.30 met. long, was first cleared, and in it were found bones of men and animals, gold plaques, and fragments of vases of Mykenaiian type. Similar remains were found in the tomb itself, but also several important objects, as follows: (1) *gold objects*; an engraved ring, two earrings (Schl., *Myc.*, fig. 162), a tiny pitcher (cf. Menidi), pearls, shells, and spirals (cf. Menidi), seven lilies, fourteen rosettes, many sheets of gold (cf. similar objects found at Menidi, Mykenai and Spata): (2) *glass paste*; sticks, shells, plaques, lily-form ornaments, rosettes, pearls, earrings, analogous to objects from Menidi and Spata: (3) *bone*; buttons, some with rosettes, square plaquette with 2 rosettes; cf. Menidi: (4) *bronze objects*; five arrow-heads and several rosettes: (5) *stone*; cone of black stone (cf. Schl., *Tir.* fig. 15), lapis-lazuli seal with figure, and two beads,—one of blue stone, the other of agate: (6) 20 *conus* shells (neolithic period), and fragments of vases sometimes with ornaments, sometimes simply with broad bands.—*Revue Arch.*, July-Aug., 1887, pp. 79, 80.

**KRETE**.—The Greek Syllogos has made some large acquisitions for its newly founded museum at Candia, which has been further enriched by a collection of bronzes and other antiquities from the cave of Idæan Zeus and the grotto of Hermes, presented to it by Signor Trifilli, Consular Agent of Great Britain and of Austria at Retimo.—*Athenæum*, Aug. 20.

*The Museum of Candia* has been enriched by the acquisition of all the objects found in the excavation of the temple of the Pythic Apollo in Gortyna, undertaken for the Italian Government by Dr. Halbherr, and of which a description was given in the *Athenæum* of July 30th. Moreover, twenty pieces of marble sculpture have been purchased. To these are to be added the 9 objects, found at Phaistos, belonging to the *Inselcultur*.

*Catalogue of Kretan Coins*.—A publication very important for ancient Kretan history will be the catalogue of ancient Kretan coins, which is shortly to appear at Athens at the expense of the National Assembly of the island. This work will be compiled by M. T. N. Svoronos, assistant to the well-known Herr Postolacca, Keeper of the King's Cabinet of Coins at

Athens. M. Svoronos has recently visited Krete, and has found there abundant materials for the completion of his studies.—*Athenæum*, Nov. 26.

GORTYNA.—Dr. Halbherr's new researches, here, brought to light inscriptions of the Makedonian period: notably, two fragmentary treaties concluded between the cities of Gortyna and Knossos, and another fragment which contains the beginning of a treaty of alliance between King Eumenes II of Pergamon and thirty Kretan cities.

In the treaty between Gortyna and Knossos is a final clause in which it is directed to be set up at Gortyna in the temple of Pythian Apollon. The fact that this inscription was found in the area of the public building which Dr. Halbherr has excavated here, apparently a temple (see description and plan, in *Athenæum* of July 30), leads to the opinion that this building was the temple of Apollon. That the primitive structure belongs to the Hellenic period is shown by remains of the Hellenic wall in the anterior part or vestibule (6.08 met. wide by 16.8 met. long): in the posterior part (14½ met. wide by 16 long) nothing of the primitive structure remains but the foundation: all the wall, together with the apse, being of Roman Imperial times, when the ancient building was rebuilt and modified.

Various fragments of statues were found: a fine headless bust and various fragments, thought to belong to statues of Apollon; and a foot of a colossal statue of Dionysos.—*Athenæum*, July 30.

LEBENA.—Recent epigraphical researches in Krete have resulted in the discovery of various interesting inscriptions at Ledda, a spot on the coast south of Messarà, where stood in ancient times the little city Lebena (then regarded as the harbor of Gortyna, from which it was distant only ninety stadia) celebrated for its sanctuary of Asklepios. The texts refer, for the most part, to various miraculous cures effected by the god, and, like those recently discovered at Epidauros, are very peculiar, and interesting for the history of medicine. The longest inscription found is an *ex-voto* of a Roman of distinction, Publius Granius, who, after being afflicted for some years with a cough that was wasting him away, avers that he recovered by the use of a singular prescription, which is set forth at length upon the stone. These epigraphical discoveries will shortly be published in the *Museo Italiano*, edited by Prof. Comparetti at Florence.—*Athenæum*, Nov. 26.

PHAISTOS.—Toward the end of October last, led by the chance-finding of a fragment of gold, the peasants began excavating in this ancient city (near Gortyna), and soon brought to light a large number of objects belonging to the so-called "Worship of the Isles" (by the Germans, *Inselcultur*). The principal objects discovered (which have been acquired for the Museum of the Greek Syllogos of Candia) are the following: (1) marble statuette of a woman, nude, with her arms crossed upon her breast, after the fashion of the idols described by Thiersch in the *Abhandlungen der Münchener*

*Akad. Philos. Philol., Cl. I* (1835), and like the examples brought from Amorgos, and now placed in the Polytechnic Museum at Athens; (2) another copy like the above, rudely worked and without arms; (3) marble head with well-ridged nose, but without eyes or mouth; (4) gold ornament, twelve grammes in weight, in the form of a *sepia* or *octopodion*; (5) small ornamental disc of bronze with a broad rim of gold all round; (6) perforated ball of gilt bronze, channelled or fluted on the exterior; (7) terracotta cylinder with figures engraved on both ends, to be used for sealing; (8) head of a man sculptured in relief upon a common stone or river-rolled pebble; (9) lance-head in bronze. This is the first time that any objects relating to this pre-Hellenic culture have been found in Krete. Objects of worship that might be identified with this period have been found in the islands of Melos, Amorgos, Keros, and Thera; and Mr. Bent has made analogous discoveries in the island of Oliaros.—*Athenæum*, Nov. 26.

#### ITALY.

**DIRECTION OF ANTIQUITIES AND FINE ARTS.**—The Minister of Public Instruction has decided that the service of the General Direction of Antiquities and Fine Arts, at whose head is Senator Fiorelli, shall be divided into three distinct sections. Comm. Felice Barnabei will be at the head of the department of Excavations and Classical Antiquities; Cav. Francesco Bongioannini will direct that of Mediæval and Renaissance Art; and Comm. Giuseppe Costetti will oversee the Institutes of Fine Arts, Musical Conservatories, etc.—*Arte e Storia*, Oct. 30.

**PREHISTORIC MUSEUMS AT SUSA AND DOMODOSSOLA.**—The increased interest taken in the prehistoric antiquities of Italy is shown by the recent establishment in the mountainous region of the North, where these remains are so abundant, of two civic museums, one at Susa, the other at Domodossola.—*Bull. di Palet. Ital.*, 1887, p. 131.

#### PREHISTORIC AND CLASSICAL ANTIQUITIES OF ITALY.

**BOLOGNA (anc. FELBINA).**—*Necropolis.*—An intact tomb, found in the public *Giardino Margherita*, contained a large number of important antiquities. Among these were: two fine black-figured amphoræ and several other vases; a beautiful unbroken flask of light green glass with two handles, 22 cent. high; four feet of an ivory chair joined by bronze fastenings. Other remarkable vases were collected in fragments—all archaic, some being entirely black, others with black figures: the most interesting of the figured vases are a voluted krater, two amphoræ, a kylix, and an oinochoë. An interesting fact is the association of archaic black-figured vases with others belonging to a very late style, and this seems to prove Brunn's theory of the

archaistic character and late use of these black-figured vases.—*Not. d. Scavi*, 1887, p. 340.

**BRACCIANO.**—*Discovery of the site of Forum Clodii.*—Near Bracciano has been found the following inscription: C·CLODIO·C·F·VESTALI|PRO·COS|CLAVDIENSES·EX·PRAEFECTVRA|CLAVDIA·VRBANI|PATRONO. This confirms another inscription found there, by which the *Claudiani* commemorated the aqueduct built for their city by Trajan, and one dedicated to the Emp. Licinius Valerianus by the *Ordo Foroelodiensium*, and gives weight to the opinion that the ancient city of *Forum Clodii* (Plin. *H. N.*, III. 52) was situated near Bracciano, on the hill of S. Liberato.—*Not. d. Scavi*, 1887, p. 107.

**BREONIO** (Veronese).—*Palethnological researches.*—Cav. Stefano de' Stefani recommenced palethnological researches in the commune of Breonio Veronese, during the first part of June. Among his discoveries is that of a centre of manufacture of lithic objects: "selci," arrow-heads, lance-heads, knives, chisels, etc. A number of the "selci" found are worked in that peculiar form which caused some non-Italian archaeologists (esp. De Mortillet) to regard them as modern mystifications. The discoveries confirm fully all the observations already made on the various groups of lithic material existing in this region and on their relation to each other. The work is not yet finished.—*Bull. di Palet. Ital.*, 1887, Nos. 5-6, pp. 98-9.

**BRESCIA** (province of).—*Ibero-Ligurian antiquities of the neolithic age.*—Professor Pigorini had already, some time since, shown that the Ibero-Ligurian populations, spread over Italy during the neolithic period, had the custom of placing in their tombs, from ritualistic reasons, a vase like a *biechiere a campana*, which in form, ware, technique and style is characteristic of the ware of the dolmens. Such a vase, together with objects of similar style, has been found in a tomb discovered at *Cà di Marco* in the province of Brescia. An important consequence is that, this tomb being attributed to the Ibero-Ligurians, it follows that the great necropolis of Remedello, only three miles distant, those of Cumarola (prov. of Modena), Sgurgola and Cantalupo (prov. of Roma) also belong to the same tribes, though referable to a later period, when objects had been introduced which were foreign to original Ibero-Ligurian manufactures.—*Atti R. Accad. dei Lincei, Rendiconti*, vol. III, fasc. 8, April, 1887.

**CIVITA CASTELLANA=ALERII.**—*Discovery of two Etruscan Temples and of a Necropolis.*—Important discoveries have been made during the last year at Civita Castellana, the site of the ancient city of Falerii, founded, according to tradition, by an Argive colony, whose great sanctuary of Hera was famous even among the Romans. These excavations have brought to light monuments and antiquities that cover the artistic history of the city from the VI to the III cent. B. C. The most important discovery was an

Etruscan temple, the first yet discovered. On account of the extent and variety of the excavations carried on, it will be convenient to reproduce from the *Notizie degli Scavi* the plan of the modern town and its neighborhood, on which the various excavations are marked: (a) temple of Celle, (b) road of *Cava del Lupo*, (c) *vigna Rosa*, (d) Etruscan road to Clementino bridge, (e) temple area in the *fosso dei Cappuccini*, (f) road from the temple of Celle towards Corchiano, (g) Vignale property, (h) plateau of Etruscan Falerii, (i) entrances to the city, (l) Terrano, (m) Montarone, prob. inhabited in Italic period, (n) necropolis of *vigna Rosa*, (o) necropolis *Morelli* (p) necropolis of *La Penna*, (q) necropolis *Valsiarosa*, (r)

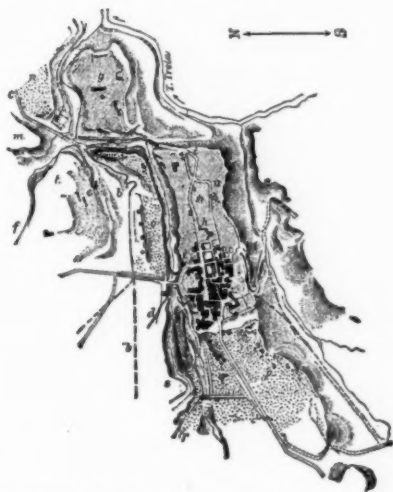


FIG. 20.—Plan of Civita Castellana and its neighborhood, showing the area of the ancient city of Falerii and its necropoli.

necropolis *Gori*, (s) group of tombs N. of Terrano, (t) group of tombs E. of Cappuccini, (u) temple of *Lo Scasato*.

*Temple at Celle.*—Until now, the description of the Etruscan temple in Vitruvius has been the main authority for its form and the details of its architecture. This is changed by the discovery at Celle, in a low place at the foot of a hill, of the remains, in excellent preservation, of a large temple of which there were found not only the ground-plan, the mosaic pavements, part of the walls in the rear, but a large portion of the sculptural and pictorial decoration, and the ornamentation of the interior and exterior: unfortunately, the front part had been destroyed by the passage

over it, from early times, of a rapid torrent. Its central position is indicated by the fact that more than four ancient roads led to it. The rear part of the temple is built against a rocky cliff: the narrow space preventing a perfect orientation of the temple, it was built from N. E. to S. W. The construction is of three cellæ, according to the traditional arrangement; the main difference being in the existence of a closed chapel or *sanctum sanctorum*, which contained the archaic image of Hera. A platform of blocks of squared tufa, put together without mortar, formed the stylobate, and on this were found the remains of a rear-wall, forty-three met. long, built, apparently, parallel with the cliff, but at a little distance from it, so as to allow a passage between the wall and the rock. This rear-wall was three met. thick and ended in two antæ, projecting somewhat along the sides. Four partition-walls, each  $1\frac{1}{2}$  met. thick, projected forward from it, dividing the building into three parallel cellæ, leaving at the sides space for the wings of the peristyle. The latter are 7 met. wide, as is the central cella, while the two side-cellæ are 4 met. in width. This is known to have been the usual disposition of the Etruscan temples, but an unexpected variation from the descriptions was found in the shape of a sort of chancel, or quadrangular apse, formed by extending the central cella about eight met. beyond the main rear-wall, and raising the pavement of the extension a step above that of the rest of the building. If we could suppose the partition-walls between the middle and side cellæ to be replaced by columns, this disposition would, without further change, be substantially that of the Christian basilica. In the centre of this apse there rises a large quadrilateral base, formed of squared tufa, sustaining a large stylobate, evidently the pedestal of the archaic statue of the deity, the head of which was found lying beside it. This head, carved in peperino, represents a perfect type of the most archaic Etruscan art. It is of large size, with low forehead, arched eyebrows and almond-shaped eyes, flat nose and prominent chin. The hair is divided into four masses, separated on the forehead, two of which surround it and fall down behind, while the others are drawn back on the occiput. The head was encircled by a bronze *stephane* or circlet of most archaic technique, composed of plates fastened together with nails. Just behind the pedestal of the statue was a pit in the floor, partly filled with votive offerings; and attached to the rear-wall of the apse was a basin, into which spring-water from the mountain was brought by a conduit through the wall.

The walls were decorated with frescos, of which, unfortunately, only small fragments have been discovered. These frescos were executed on plaques of whitish terracotta covered with a thin white plaster, of which about fifty pieces were found: these were fastened to the wall. The large-figured compositions are not comprised within a continuous frieze, but are

in separate compartments bordered by white palmettes on a black ground : under them was a painted base with Greek rectangular pattern in red on a red and black ground. Part of a female bust, drapery, the profile of a youth on a black ground, are nearly all that remains, but these are sufficient to show that the art was correct and developed—similar to that of the first Golini tomb at Orvieto and the earliest part of the Tomb of Polyphemos at Tarquinii, where the Etruscan element is already transformed into Græco-Roman art. The cellæ were lighted by large windows which had been closed by openwork terracotta slabs, of which many fragments were found : some of these were modelled in relief on one side, and painted on the other, the former probably facing inwards, the latter outwards. The greater part of the fragments found belong to the decoration of the friezes and the gable. Two elements constituted the continuous frieze that encircled the front and sides of the building : (1) a strip with palmette and spiral decoration, stamped and colored white on a black ground, and (2) a strigiled cornice of slight projection, about 0.45 met. high, with a tore at its base. Holes in this terracotta decoration go to prove that it was fastened by nails to a wooden background, and that the skeleton of the frieze, gable, and perhaps of the atrium and peristyle, were of wood. Of the decoration of the gable there only remain four fragments of figures in high relief, applied to terracotta slabs which were in turn nailed to the framework of the gable. These fragments are : the right leg of a youthful male figure, with a piece of the chlamys : two large fragments of rich drapery of a female figure in a thin tunic that shows the forms of the body, and a himation that rises from the back to fall in front over the left shoulder, a piece of the garment preserving its red coloring ; this fragment, which belongs to a figure half life-size, gives a front view of thighs and chest up to the neck, including the left arm : another fragment is of the nude right breast of a female figure. These beautiful fragments are examples of Græco-Roman art at its highest perfection, and contrast with the above-described decoration, which belongs to a decaying local art. To this local art belong also the antefixæ found, among which is especially to be noticed that with a *protome* of a faun with long red beard, red face and white eyes, crowned with a vine-garland ; it is in low relief and of marked Etruscan style : all the antefixæ represent fauns and nymphs. There were also found fragments of the roof-covering of the temple that corresponded entirely with the antefix-openings.

A reconstruction of the temple is made easier by Vitruvius, and by the known arrangement of the temple of Jupiter Capitolinus, of which the division into three parallel cellæ, pronaos and peristyle, and the early terracotta decoration, are entirely similar to this temple. The approximate measurements would then be : width, 43 met. ; length, 50 met. ; depth of

atrium and of sacellum, 25 met. each. It is probable that our temple was hexastyle, *i. e.*, had six columns on the front. That portion of the middle cella which is raised and lengthened in the shape of a quadrangular apse, forming the unusual feature, leads to the conjecture that this part of the building belonged to an earlier construction, and that being of peculiar sanctity, because containing the archaic image of the goddess, it was respected at the time of reconstruction in the third century B. C.

The size, magnificence, and position of this temple lead Gamurrini and Cozza to believe it to be the identical famous temple of Juno *Curitis*, the patron goddess of Falerii. Its festivals and the splendor of the temple were described by Ovid and Dionysios of Halikarnassos, and their descriptions are strong evidence for this identification.

*Ruins of a second Temple.*—While the temple above described was being discovered at Celle, Count Cozza began to explore that highest uninhabited part of Civita Castellana, near the hospital, which is called *Lo Scasato*. At a depth of only half a metre, the ancient level appeared: it was everywhere strewn with fragments of terracotta sculptures whose size and number indicated that the temple they adorned was large. Unfortunately, no trace of the plan of the temple remains; its total destruction being due to the continuous succession of buildings on this site. An examination of the fragments make it possible to distinguish the elements that formed the trabeation, the friezes, the gable, *etc.* The frieze repeated the common decoration of spirals alternating with palmettes colored white and red on a black ground, as in the temple at Celle. This frieze was divided from the crowning cornice by a small tore. The cornice resembles that of the other temple, has a slight projection, and is divided up by strigiled leaves with traces of coloring, being covered with whitish stucco. The tympanum was crowned by another tore that framed the reliefs, above which was again the strigiled cornice finished with a quarter-circle moulding, with trilobated leaves colored yellow on a red and black ground. The antepagmenta of the trabeation and the upper part of the tympanum have holes at regular intervals in which the nails still remain: this, combined with the absence of mortar, confirms the supposition, suggested for the temple at Celle, that the ossature was of wood. Of the tympanum-sculptures there remain: (1) head of a young woman, two-thirds life-size, with tightly-curved hair held by a high *sphendone*; the face is covered with whitish stucco, and the hair is colored dark red: it was attached in profile: (2) fragments of a nude male statue—right eye and temple, thorax, arm, sword-handle, left leg, and portions of flying drapery: (3) fragment of the forehead of a youth: (4) the more usual antefixæ are represented by a *protome* of Faunus with rounding curly beard and hair covered with a tiger-skin, the paws of which are tied around his neck: (5) a large number of antefixæ containing small figures in relief.—*Not. d. Scavi*, 1887, pp. 137–39.

*Necropolis of La Penna.*—The large necropolis of Falerii has been explored in several of its parts: near the city-limits are two sites with traces of tombs, one on the left, called *La Penna*, on the road to Nepi, the other on the right, called *Valsiarosa*, on the Tarquini estate. The tombs excavated at *La Penna* are the earliest yet found: their content corresponds with that of the so-called Egyptian tombs at Tarquinii, and among them are many objects with graffiti that recall the period of the case-tombs at Tarquinii, Visentium, etc. The tombs explored are chamber- and trench-tombs: all the former, with two or three exceptions, were found to have been despoiled; the latter contained objects that varied but little from those found in the chamber-tombs. The trench-tombs occupied the highest and flattest part of the ground, and consisted of rectangular trenches, 1.40 met. wide by 1.70 met. long, cut to a depth of about two metres. On the bottom-level, on the long sides, there were opened two *loculi*, about a metre wide, ending at the head in a round niche: after the body and the funerary objects had been placed in them, these niches were closed by large parallelopipeds of tufa, leaving the central trench free. The tombs are orientated so that the head of the defunct is always turned toward the east, i. e., toward the walls of Falerii. The dampness of the ground has led, in great measure, to the destruction of the contents. The group of vases surrounded the head in the circular niche; a small number were placed at the feet. There is no indication of the archaic age in the eight tombs opened. The four hall-tombs opened are situated on the tufa-front which surrounds the plateau on the south side. One of these is of especial interest, as evidently it had been transformed several times, and showed traces of burial at three distinct periods; as is proved also by the three classes of vases it contained. To the *first period* belong (1) a large vase with cylindrical body and hemispherical bottom, two long handles ending in goat-heads, and some graffiti, especially two confronting horses; (2) a vase of similar style, somewhat smaller; and (3) a number of fragments of vases of the same class, covered with graffiti filled in with red ochre. These vases belong to the most archaic period, when the first attempt at drawing figures was made. In the *second period*, the tomb was doubled in size by opening up the left side: belonging to this time are only five small and unimportant vases, which repeat the form of the *Villanova* cinerary urn. The *third period* contributes some good vases: a krater, whose paintings show it to belong to the Campanian school, has two Fauns with circular shield; richly robed females with a sceptre, before one of whom stands a male genius; Bellerophon on horseback, casting a lance at the flying Chimaera, etc.; the back contains a Bacchic procession. Among other vases found in different tombs are, (1) a bucchero vase with two inscriptions; (2) a red-figured vase, with Latin inscriptions, belonging to an artistic

development that now appears for the first time, and around which can be grouped some other vases of similar style but without inscriptions.


Later excavations were concentrated on the hall-tombs, in most of which the traces of three successive tumulations, as noticed above, were evident, the last of which corresponds to the close of the third cent. B. C. A large number of vases of various styles were recovered from these tombs: among them are some rare archaic examples, and some good Campanian red-figured vases among many of poor local style. Beside vases, the excavations yielded inscriptions, bronze candelabra, mirrors, strigils, and other utensils, ornaments, and arms, in bronze, terracotta and iron.—*Not. d. Scavi*, March, April, May, July, 1887.

*Valsiarosa Necropolis*.—The plateau of the *ex-vigna Tarquini* was divided into "islands" by streets of tombs, cut deep in the tufa, so as to ensure a passage and to open up the entrances: one of these streets is now entirely uncovered. The excavations were begun in September, 1886: the first two archaic tombs explored had been anciently pillaged, but their contents were still interesting, as were those of the *Penna* necropolis, for an historical study of the necropolis, and as a proof of the opulence of the Faliscan people. *Tomb I* is cut out of the tufa, and is without artificial masonry: it has an almost-flat ceiling supported by a heavy pier. By later owners, three rows of *loculi* were cut in the walls, and the tufa mortuary-couches were cut away. Among its contents are three nude male bronze statuettes of early Etruscan art, and a quantity of small bronze objects, of vases and terracottas. *Tomb II* had a round-arched entrance and two piers supporting its roof, which had fallen in. It also had been devastated, and contained only some objects in one corner which were overlooked: they are mostly of bronze or bone; several pieces of gold jewelry—earrings, fibula, clasp; of silver jewelry—amphora, spinther; bucchero vases; etc. "Taking into account the discoveries in the *Penna* necropolis described in two preceding papers (*Notizie*, 1887, pp. 170, 262), it clearly appears that the period to which the earliest tombs of the Faliscan necropolis belongs is the archaic Etruscan, in the same way as the trench-tombs or *Egyptian deposits* of Tarquinii and Chiusi are Etruscan. A distant reminiscence of the Italic period is represented by the hand-made pottery, which in these tombs has reached its highest point of development, both for elegance of form and for technique. It is remarkable, among the most perfect Italic productions, for attempts at figured decoration. The remains hitherto discovered belong entirely to the Etruscans, not to Italic culture. Cell-tombs seem to have been universally employed after the destruction of ancient Falerii; and this explains the absence of a real necropolis near the new *Aequum Faliscum*, as well as the presence of *loculi* in the archaic tombs."

The excavations from Oct. 15 to Dec. 15, 1886, led to the discovery of

six more tombs, giving a mass of material for the study of Faliscan archaeology at different periods. Remarkable are fragments of large vases with figures in relief like the fine vases from Orvieto now in the British Museum. When discovered, a number of the figures had a polychromatic decoration. There are many painted vases of the late decadence; and others (such as a large krater where each figure has its Greek inscription) are of good Attic art. Many bronzes, also, were found in these tombs.—*Not. d. Scavi*, 1887, pp. 307–19: cf. *Bull. Istituto arch. germ.*, 1887, 1.

**CIVITELLA D'ARNA** (near Perugia).—*Etruscan tombs*.—On this site, between Perugia and the Tiber, were found a number of so-called Etruscan tombs, of the III century, containing quite a number of precious objects, especially jewelry. In the first tomb were two small circular gold earrings, one end pointed, the other ending in a lion-head; also a mirror engraved with four figures. The second tomb yielded nothing but a silver ring. The contents of the third tomb were rather rich: the mortuary bed was of wood sustained by six fine bronze bases adorned above and below by three concentric circles. The jewelry, etc., which show the occupant to have been a woman, consist of the following: a pair of gold earrings with rosette, from which hangs a small amphora with chains; a fine gold ring with a garnet; two silver bottle-shaped unguent-boxes; another silver spherical unguent-box with a cover and ornamented with festoons hanging from ram-heads; fragments of silver necklace. Besides, there were a few objects in bronze and bone and a sextant of Todi, of the second series with the anchor and toad. The fourth tomb was rich in jewelry and glass, as follows: two gold earrings, with rosette, from which hang a series of chains held together at the bottom by three undulating chains; a large ring; two finely-preserved *unguentarii* of dark blue glass; probably also two strigils, fragments of mirrors, etc.—*Not. d. Scavi*, 1887, p. 86.

**CONCORDIA**.—*Military Cemetery*.—In the cemetery of Roman soldiers has been found the following Christian-Greek inscription of an Asiatic soldier who probably belonged to one of the armies sent by the Emperors of the East to Italy, early in the fifth century: ΕΤΟΥΣΒ Π ΎΕΝΘΑΔΕ ΚΑΤΑΚΙΤΕ | ΑΕΞΕΤΑΧΟCΑΥΡΜΑΡΚΙΑΝΟCΑΛ | ΑΟΥCΤΙΟΥΚΩ ΜΗCΦΙCΩΡΟΥΡΑΝΤΙΟ | ΧΕΩΝΕΤΩΝΙΘΕΑΝΤΙCΤΟΛΜΗC ΗΑ | ΕΤΟΝCΟΡΟΝΤΟΥΤΟΝΑΝΕΥΤΩΝΙΑΙ | ΩΝΑΥΤΟΥΔΩCΗΤΩ ΤΑΜΙΩΧ /// ΑΜΙΑΝ. On each side of the inscription was the square Constantinian monogram . There has been considerable difference of opinion as to the dates given in these Concordia inscriptions. Mommsen considers them to be reckoned from the era of the Seleukidai, while Usener starts with the Caesarean era (706 A. U.). The latter hypothesis would best suit this inscription, as it would date it from A. D. 434, which is late enough, instead of from 470.—*Not. d. Scavi*, 1887, pp. 305–7.

**CORCHIANO.**—*Discovery of a necropolis.*—The modern village of Corchiano is built on the *arz* of an ancient city, thought by the majority of archaeologists to be the ancient Fescennia, the neighbor of Falerii. During the last year, in consequence of a lucky discovery, many of the landowners whose properties lie on various sides of the village have been excavating for tombs, and have brought to light a large number, belonging for the greater part to the fourth and third centuries B. C., though some are of an earlier date. The contents may be divided into three classes: vases; bronzes; and jewelry. Aside from a few archaic specimens, the majority of the vases belong to the late red-figured style, and appear to be of local manufacture. Among the bronzes is the first known example of the *kottabos*, a game played by Greeks and Romans (illustrated by Helbig, *Bull. Inst. Germ.*, 1886, pp. 234–42), a number of engraved mirrors, candelabra, etc. The jewelry belongs to the well-known class of Etruscan gold-work, and comes from the earlier tombs.

**FAENZA.**—*A Terramara.*—Near the Villa Abbondanzi, at Faenza, a vast Terramara has been discovered by the Signori Gallegati and Panzavolta. The objects unearthed up to the present are the usual vases with nail and band ornament, and some lithic arms.—*Not. d. Scavi*, 1887, p. 166.

**FERMO** (Piceno).—*Bronze helmet.*—An archaic bronze helmet, spherical in shape and of a single piece without joinings, has been found here. Its ornamentation consists in a series of lines of raised balls, hammered out, between which are lines of points. These lines are interrupted by four disks formed by concentric lines of points around a raised circle. Except for this peculiar decoration, it is similar to other helmets of this simple form found in the earliest necropoli, especially at Tarquinii.—*Not. d. Scavi*, 1887, p. 156.

**FRASCATI.**—There has been recently discovered, here, a tomb in which was found the skeleton of a man having a bronze collar on the neck: on the back part of the collar was engraved the following inscription: *Teme me | et rebocca me ad Aproniano palatino | ad mappa aurea | in Abentino quia fuggi.*—*Moniteur de Rome*, Oct. 5.

**GOLUZZO** (near Chiusi).—*Archaic bronzes.*—The collection of archaic bronzes discovered at Goluzzo, a half kilom. S. of Chiusi, in 1882 and now preserved in the Prehistoric Museum in Rome, are for the first time described in the *Bullettino di Paletnologia Italiana*, 1887, pp. 109–17 (pl. III). These bronzes were all refuse pieces broken up in preparation for melting down. This series may be compared with the corresponding but richer one of the *fonderia di S. Francesco* of Bologna. They belong to the first iron age, though one form of the *ascie ad alette* is intermediate between the bronze and the iron age. They are not related to the most archaic Villanova strata or to the most recent, but to that flourishing middle

age determined at Bologna by the *predi Benacci primi*, and in Maritime Etruria by the well-tombs (*tombe a pozzetto*), i. e., not posterior to the IX-VIII cent. B. C.—*Bull. di Palet. Ital.*, 1887, pp. 109-17.

**GRUMELLO.**—*Consular Coins.*—About 800 Roman consular coins were found here lately, all silver *denarii*. Only 180 of these were examined: they were in fine condition and belonged to the following families: Antonia, Antestia, Aquilia, Caesia, Calpurnia, Crepusia, Cupiennia, Fabia, Fonteia, Fouria, Herennia, Julia, Licinia, Lucilia, Maenia, Mamilia, Manlia, Memmia, Minucia, Norbana, Papia, Pompeia, Porcia, Postumia, Proclia, Sergia, Servilia, Terentia, Titia, Tituria, Vibia.—*Not. d. Scavi*, 1887, p. 166.

**LIMONE-MONTENERO** (near Livorno).—*Archaic bronzes.*—In 1879, a lot of early bronzes were discovered hidden in a grotto. They have lately been donated to the commune of Livorno, and are described in the last number of the *Bull. di Palet. Italiana* (1887, pp. 117-26, pl. iv). They are in many cases well preserved, and may be divided into three groups. Among the objects are: hatchets, lance-heads, knives, chisels, fibulae, a belt, hair-pins, armlets, spirals, rings, bits, etc. Compared with the bronzes of Goluzzo described above, this Montenero group presents, chronologically speaking, a greater archaism of forms, showing a slightly earlier date. The fact that a number of pieces are new or but little used, and that they were found in a grotto, suggests that these bronzes might have been an offering to some divinity, though it is more likely that they formed a movable stock of bronzes.

**LUCANIA.**—*An ancient City.*—Cav. Ferd. Colonna reports his discovery of the site of an ancient city in the commune of Accettura on the mountain called *Croceia Cognato*. The city had a double wall; one, 1340 met. in perimeter, inclosing the entire city; the other, 679 met. long, surrounding the acropolis. It has the shape of an irregular trapeze with a lower acute angle. The walls are between four and six metres in thickness, formed of a mixture of large blocks and rubble without cement. Close to this site, on another spur of the same range, is a village with walls of similar construction.—*Not. d. Scavi*, 1887, p. 332.

**MANDURION.**—*City and Necropolis.*—About midway between Lecce and Tarentum is the site of the ancient city of Mandurion, founded at a very early date, and rendered famous by its desperate resistance to Archidamos of Sparta (who was killed before its walls), to Hannibal, and to Fabius Maximus. Of the Messapian (pre-Roman) period its famous and strong double walls remain, with a perimeter of about three miles, built of local calcareous sandstone in regular isodomic construction. Though rich in antiquities, the ground within and without the walls has never been regularly explored. In 1872, an important find of prehistoric bronze arms

and utensils was made. During this year, discoveries were made in its necropolis. The 13 tombs unearthed are all within the walls, on the property of the Signori Gigli. They are rectangular in shape, generally about 1.60 by 0.90 met. in size, cut in the sandstone to a depth of about one metre, and covered with large slabs. No inscriptions were found in the tombs, but many vases, some gold ornaments and iron strigils. The figured vases have white or yellowish figures on a black ground.—*Arte e Storia*, 1887, No. 17.

**MARINO** (near).—On a property belonging to the Signori Vitali, on the *Via Appia*, has recently been discovered a magnificent statue in Greek marble, which some archaeologists think represents Julia, the daughter of Titus Vespasianus.—*Moniteur de Rome*, Oct. 9.

**NEMI**.—*Temple of Diana*.—The excavations undertaken on the site of this temple by Sig. Boccanera were continued during the month of March and brought to light many votive objects as well as coins. Of special interest are two bronze tablets with archaic inscriptions as follows:

- (1) POVBILIA · TVRPILIA · CN · VXOR ·  
HOCE · SEIGNVM · PRO · CN · FILIOD  
DIANAI · DONVM · DEDIT ·
- (2) C · MANLIO · AC(*idino*)  
CO<sup>s</sup>OL · PRO  
POPLO  
ARIMINE<sup>s</sup>I

It is suggested that the C. Manlius Ac(idinus) of the inscription is the same who was consul 575 A. U. = 179 B. C.—*Not. d. Scavi*, 1887, p. 120.

**ORVIETO**.—*Discoveries in the Necropolis*.—Excavations have been continued in the following localities.

1. *Terreno Baiocchini*, outside Porta Maggiore. This site is close by the ancient road that led from Orvieto to Bolsena in Etruscan and Roman times. On the left (towards Orvieto) were many remains of Etruscan tombs, some a *camera*, many a *cassa*: on the right were immense walls of squared tufa, remains of a large building. Even in Roman times this locality was used for burial, as is shown by tombs with coins and inscriptions. One of these fragmentary inscriptions belongs to the II cent. B. C., and is the earliest Roman inscription found on this territory: it would indicate the date of the return to the destroyed city, and to this time belong also three uncial As. For the present, the use of the building mentioned above (perhaps a Bath), as well as that of another not yet excavated (probably a Temple), has not been ascertained. The greater part of the tombs seem to have been in the shape of trenches with walls built of tufa and containing one or two funerary urns. One of these tombs was covered with

a large square base of whitish tufa with a simple but elegant base, measuring 0.88 met. each way (= 2 Etruscan feet?), on which, it is possible, stood one of the two funerary columns found near there, one being ornamented, the other plain. That with ornamentation is of special interest, as stelæ of this kind are extremely rare in Etruria. It is of the Doric order, imported from the East, is channelled and is 1.60 met. high. It is not regular, but at the middle it begins to curve outwards, growing broader toward the base. A branch of ivy and a meander worked with masterful elegance adorn the top and bottom. Instead of a capital it probably sustained a kind of pine-cone or egg (*cf.* two stelæ in Canina, *Etr. Mar.*, tav. cxxx). The plain column is larger, being 2.30 met. high. Stones were placed to show the position of each tomb: some are of the ovoid form on a square base, as at Vulci; others are of black stone of lenticular shape on a raised base. Of especial interest is a large one, with its abacus, neck, lintel and base, and with the black stone placed in the centre of the abacus, while two plates of bronze were fixed on the sides, in one of which was a horse, and in the other a mastif, both of bronze and of the III cent. B. C. As the contents of the tombs were removed without any order or proper supervision, it was not possible to make a satisfactory classification. Still it is evident that this part of the necropolis is not very early, the earliest objects found being some fragments of vases with black figures, of a somewhat severe style. The main period is the third cent. B. C., as is shown by the many small cinerary urns, vases, bronzes, and terracotta pyramids of this time. Then, there come some traces of the close of the second and beginning of the first cent. B. C., while, above, the Romans of the Empire erected their tombs. The vases are not of great value, the majority being of Etrusco-Campanian ware.

II. *New excavations in Contrada Cannicella.*—In March, the entrance of a tomb was uncovered on Signor Palazzetti's property. Among the contents were a large number of vases and mirrors; but of more importance were the coins, which showed the date of construction to have been 230 B. C., about 40 years after the destruction of Volsinium Vetus by the Romans, and that the tomb was used until the second century, that is, for at least two generations. Both rites—inhumation and cremation—were used. The eleven mirrors found, show that eleven women were buried in it. What makes this tomb interesting for the history of ceramics is the series and kind of the two hundred or more vases found in it, which are all of local manufacture: none are painted. This would seem to prove that there was no longer any importation of painted vases into the territory, and that local industry had ceased making them.—*Not. d. Scavi*, 1887, pp. 87-91.

*Important discoveries in the Fondo Bracardi and Prioria S. Giovenale.*—The necropolis of Orvieto extends to the S. W. across the plain and up the

hills towards lake Bolsena. The furthest portion has been explored in two sections, one at the *Cannicella* already several times referred to, the other on the properties called *fondo Bracardi* and *prioria di S. Giovenale*. The results of excavations on the latter site have been extremely important, and they are reported at length, in the September number of the *Notizie degli Scavi* (1887, pp. 344-72) by Comm. Gamurrini, Count Cozza and Signor Pasqui. Seven plates from beautiful drawings by Count Cozza illustrate the discoveries. This part of the necropolis is divided into rectangular islands by streets of tombs which it has been the object of the Government Inspectors to preserve intact. In a number of cases, the fronts of the tombs bear Etruscan inscriptions giving the name of the deceased owner: this special group of seven tombs is of particular importance as presenting the architectural features of the best Etruscan period. The tombs are well built of great masses of tufa: the inscriptions are archaic and important for the names mentioned. The abundance and variety of the contents of these tombs are such that a review and classification of them by Count Cozza and Sig. Pasqui make it possible to clearly establish certain general facts regarding the kinds and styles of vases, etc., that were placed in the necropolis. The writers first give a complete descriptive catalogue of the objects, tomb by tomb: they then proceed (1) to establish the principal types of vessels: (2) to classify them in the order of the progressive succession of technique and forms. The main object is a study of the vases according to the uses to which they were put. Three general classes are made (a) Etruscan *bucchero* pottery; (b) Greek pottery; (c) utensils, ornaments and arms. In the *bucchero* category of black ware the vases are classified under the following heads: I, vases for mixing; II, for pouring; III, to contain liquids; IV, for drinking; V, vases for comestibles; VI, for cooking. Examples of all the various forms of vases included in these classes are given in the plates that accompany the report.

PERUGIA (near).—*Excavations at Monteluce*.—During the second half of April, excavations were carried on in the property called *Ara*, near Monteluce, close by Perugia. The tombs contained the following objects:—(1) ordinary vases; an iron lance; an iron battle-axe; an iron dagger; a bronze helmet with linear decoration; a mirror with engraved figures; two small gold earrings; a bronze hair-pin: (2) a bronze helmet; metal cuirass and greaves; a *kottabos* with its statuette; some metal vases; a lance and other arms: (3) a bronze vase with round mouth decorated with a chiselled meander, and with a semicircular handle ending in an elegant chiselled mask; a *kottabos* with its statuette; a metal vase in remarkable preservation and of elegant shape, with a mouth in the form of a laurel-leaf, with a foot, and a handle that reaches from the edge to the body, decorated with a superbly chiselled rosette; a finely-preserved bronze hel-

met with elegant decoration; an iron sword; etc.—*Not. d. Scavi*, 1887, pp. 167–70.

**POMPEII.**—*Recent finds.*—Fresh discoveries of interest have recently been made at Pompeii. Some waxed tablets have been brought to light, which, however, by the action of the water that has filtered through the earth have been reduced almost to a state of decay. It is only in a few places, where the injury has been less, that the characters impressed on the wax can be deciphered. Besides these tablets were found, at the foot of a staircase, a *tazza* of elegant form, standing on a little foot, and having two handles; also four other *tazze*, a bowl, with simple decorations round the edge, and five other bowls of a like character, four well-preserved plates, a large cup, and a small statuette on a square basement, with the figure of Jupiter seated on a throne, holding the lightning in his right hand, but lacking the left arm. The upper part of the body is nude, whilst a mantle falls over the legs and the loins, and the border hangs from the shoulder. A circular dish was also found, but in fragments; and some earrings in the form of a clove of garlic, and others with "pensile" rods. Another report says that, at the beginning of September, many surgical instruments and two speculæ were found; and, so late as last week, a lot of small vases in terracotta, and a plate or two of silver. Near these were found the remains of some *tavolette cerate*, on one of which was read a great portion of a contract for the sale of some young boys (*pueros*), the price of whom was to be paid in the Forum.—*Athenæum*, Oct. 15.

**ROMA.**—*The New Central Museum.*—The great national museum, the construction of which has been discussed for several years, is soon to be erected. A convention has been signed between the syndic, Duke Torlonia, and Sig. Coppino, the Minister of Public Instruction, according to which the city obliges itself to hand over to this museum, on perpetual deposit, all the antiquities which it already possesses, and all those that may be discovered in future, with the exception of the contents of the Capitoline Museums. The State will also place there whatever is found on property belonging to it in the city or province of Rome.

The Museum is to be erected between the Coelian and the Esquiline, and will cost, according to the estimates, 2,204,989 *lire*, including 246,525 *lire* for the land: of this the city is to pay one-third, the Government the rest. The Communal Council approved this convention. Work will be at once commenced (June 1887) on the construction of the part which is to contain the antiquities already discovered, and which is to cost 510,000 *lire*. The entire building is to be finished in less than three years.—*Moniteur de Rome*, May 22.

*Ethnographic collections at the Kircher Museum.*—Several important ethnographic collections have been added to the Kircher Museum. First in

size is that made by Dr. Finsch, composed of objects from Melanesia, Polynesia, and Micronesia, collected mainly from the Caroline, Marshall, and Gilbert archipelagoes, New-Ireland and New-Britain, and the S. E. of New Guinea: they number over 1800. Two other collections, each comprising about 500 objects, have been purchased, both formed in Western Africa; one by Count Brazza, the other by Cav. Bove. Finally, a collection of several thousand specimens was secured by Professor Lanciani while in America, consisting mainly of objects illustrating the civilization of the Zunis.—*Atti d. R. Accad. d. Lincei, Rendiconti*, vol. III, fasc. 8.

*Lectures on Epigraphy.*—Dr. HALBHERR, well known by his discoveries in Krete, has been entrusted by the Italian Ministry of Public Instruction with the delivery of a course of lectures on Greek epigraphy, for the year 1887-8, at the Roman University.—*Athenæum*, Dec. 24.

*Archaic tombs.*—Four archaic tombs belonging to the early series already discovered in this region—between the Via Merulana and the church of San Martino—have been found in digging a drain. They were dug in the ground and covered with rough slabs of tufa. *The first* contained, beside remains of the unburnt body, only two vases of the well-known Latial type; *the second* had three vases, two of which had scratched decoration, the second a raised decoration a *cordoni*. In *the third* was a complete skeleton. Two of the tombs contained some small bronzes.—*Not. d. Scavi*, 1887, p. 372.

*ARCHITECTURE.—Early Capitoline walls.*—The remains of very ancient walls, recently uncovered on the eastern side of the Capitoline hill, consist of two pieces built of rectangular masses of tufa, somewhat more than two metres apart. About twelve metres have been unearthed: it is still uncertain whether these walls formed the substructure of a peripteral temple or whether they are remains of the very early fortified encircling wall of the Capitoline *arx*. At a distance of some 40 met. has been discovered another wall, almost parallel, also built of large parallelipeds of tufa, but perhaps belonging to a somewhat later period: it extends from the side of the Aracoeli church to the top of the hill overlooking the Via Giulio Romano.—*Bull. d. Comm. arch.*, July.

*Temple of Minerva Medica.*—The vexed question of the identity and site of this temple—whose position was up to the present unknown—has probably been settled by a recent discovery. In opening a new street parallel to the Via Merulana (between the Vie Macchiavelli and Buonarroti) there was found, at about two metres below the street-level, the remnant of an ancient construction in squared tufa, and near it an immense deposit of votive terracottas—statuettes, arms, legs, hands, feet, and other parts of the human body, animals and birds. The fragment of a vase has an archaic inscription which may be read as follows: (Me)nera[e] dono de(det). The site is within the Augustan *Regio V*, where the temple of

Minerva Medica is placed by the regional books; and the offerings to a health-giving divinity must be attributed to that sanctuary, whose site is determined by the construction in tufa. Among other objects found was a small male figure in bronze wearing a helmet and carrying a patera in its right hand; also a terracotta head of Minerva with the ancient Greek helmet (αἰλῶπις).—*Not. d. Scavi*, 1877, p. 179; *Bull. d. Comm. arch.*, May.

*Porticos in the VII Region.*—Sig. Borsari seeks to increase our scanty knowledge of the monuments of the *Regio VII (via Lata)* by examining the results of excavations made between the *via Frattina, piazza Colonna, Corso, and piazza Poli*. These show, taken in connection with previous finds, that the whole of the north part of this *regio* was filled with noble and spacious porticos forming an uninterrupted series that joined on to those of the *Regio IX*. These porticos were built of large blocks of travertine. The previously-discovered remains had been identified by most archæologists with a group of buildings erected by Domitian: still it is likely that these porticos were built in the time of the Flavii. In the southern part were the porticos of Vipsania Polla built by Agrippa, and that of Constantine.—*Bull. d. Comm. arch.*, May.

*Building near the Chiesa Nuova.*—Portions of a grandiose building have been found between the courtyard of the Sforza Cesarini palace and the square of the Chiesa Nuova. Four travertine columns were found: then, at a depth of 5 met., a large marble doorway, 1.90 met. wide: at a distance of 2.30 met. from it, were uncovered three steps of a broad marble staircase. Two more doorways of similar style were found, the distance between each being the same—13 metres. It was not possible to widen the trench so as to discover more of the building.—*Bull. d. Comm. arch.*, Sept.

*House of Æmilia Paulina Asiatica.*—Between the Via Genova and the Palace for Art Exhibitions, remains of a large building have been found which was once owned by Æmilia Paulina Asiatica, doubtless a descendant of the Æmilii Pauli. A violent fire melted all the bronze objects, as is proved by several molten masses, but, in one corner, a number of utensils and other articles in bronze were found, which had fallen from above. The ruins had been anciently pillaged.—*Bull. d. Comm. arch.*, Sept.

*Tombs on the Via Portuense.*—In the Vigna Jacobini, about one mile on the Via Portuense, was found one of the ancient tombs that flanked the Via Campana, well built of bricks, with external angles decorated with elegant pilasters of the Augustan age. Its chamber had been devastated *ab antiquo*: under its pavement were other tombs for inhumation. Near it were found numerous fragments of sculpture, decoration and inscriptions. Five other tombs were afterwards opened, the pavement of the fourth consisting of the mosaic of the Rape of Proserpina described below (p. 477). The second tomb was about six metres square and built of rectangular

masses of travertine: its peculiarity consisted in having three tombs excavated and regularly built up in the pavement of the chamber, which were originally covered with slabs of travertine. In the fifth was found the fine basrelief of Pentheus and the Maenads described below. A large number of pieces of sculpture and of epitaphs came from these tombs.—*Bullettino d. Commissione archeologica*, July.

*Via Salaria*.—The excavations continue to bring to light numerous tombs and inscriptions belonging to this immense necropolis, already several times mentioned in the JOURNAL.

*Mausoleum on the Via Nomentana*.—A sepulchral monument of fine construction and in perfect preservation was found here, but destroyed at once. It was built of large rectangular slabs of peperino, and consisted of two chambers.—*Not. d. Scavi*, 1887, p. 327.

*Discovery regarding the "Aqua Augusta Alsietina"*.—Near the Via Clodia, about 15 miles outside the Porta del Popolo, an inscription has come to light which Prof. Barnabei reads as follows: *Imp. Caesar. divi. f. | AVGVSTVS | (p)ONTIF. MAX | (for)MAM. MENTIS. ATTRIB. | (in r)IVO. AQVAE. AVGVSTAE | (q)VAE. PERVENIT. IN | NEMVS. CAESARVM | (et) EX. EO. RIVALIBVS. QVI | (per b)VCCINAM. ACCIPIEB. (ant) | (aquam perennem dedit)*. This stone was used as a covering to a water-conduit leading from the lake of Bracciano. This is the first epigraphic evidence of the *aqua Alsietina*, which the Emperor Augustus had brought from the *lucus Alsietinus* into the Trastevere, not for drinking purposes, but to feed the *naumachia*—the surplus being destined for irrigation, especially in the neighboring gardens and fields. An important question is, whether the canal was used for irrigation also along the tract of the Campagna through which it passed. This inscription is a record of a work undertaken to assist the irrigation by supplying a constant flow of water from the aqueduct above, which until then could only be used at certain limited hours.—*Not. d. Scavi*, 1887, pp. 181–86.

*SCULPTURE*.—*Relief of the myth of Pentheus*.—A basrelief found in May on the Via Portuense is illustrated in the July number of the *Bull. Comm. archeologica*. On it is a young man defending himself with a short sword against two maenads armed with the thyrsus, who are on the point of overcoming him. The subject is considered by Borsari to represent the last moments of Pentheus, who succeeded Kadmos on the throne of Thebes and opposed the introduction of Dionysiac rites. Having gone to Mount Kiteron to spy out the mysteries, he was discovered and killed by the Maenads. Representations of this subject are extremely rare in classic art. This basrelief probably belongs to the first century B. C., but is evidently copied from some Greek original.

*Relief of the Gigantomachia*.—While excavating in the *Via San Pietro*

in-Vincoli, were discovered two marble fragments of a relief with figures which, in the opinion of Comm. Visconti, represented the *Gigantomachia*: they evidently belonged to an ancient monument. The site of the discovery was in the ancient *Regio V* of the city.—*Moniteur*, Oct. 6.

*Statue of Fortuna*.—On the Via Merulana there has been found a statue of Fortuna which is in a perfect state of preservation except that the extremity of both arms is missing. It is similar to the statue found a few years ago at Ostia, now in the Braccio Nuovo.—*Moniteur*, April 10.

*Archaistic Sculpture*.—In the Villa Ludovisi a piece of sculpture was found of peculiar shape and style, similar to the front and sides of a sarcophagus, with a relief on each face. The face has suffered by the destruction of its upper part, thus cutting off the head and shoulders of two female figures dressed in long chitons with fine folds, who stoop over and hold a third female who is on the point of sinking through the ground in the centre. On one end, a graceful naked female figure seated, with crossed legs, on a cushion plays on the double pipe, while on the opposite end a fully draped female, with himation covering her head, seems to be making an offering. The style is severe and correct, and decidedly archaistic: it is probably a work of the Augustan age.—*Bull. d. Comm. arch.*, Sept.

*MOsaic*.—*The Rape of Proserpina*.—A mosaic pavement found outside the Porta Portuense, in the *Vigna Jacobini*, represents, in black and white figures, the Rape of Proserpina. It formed the pavement of a sepulchral chamber 3 met. long by 87 cent. wide. Mercury holds the reins of the infernal chariot with his right, standing in front of the horses, while in his left, from which the chlamys hangs, he holds the caduceus. The next figure is that of Minerva who advances rapidly, wearing a helmet and carrying an Argolic shield and lance in her left: she gazes at Proserpina and with her right makes a gesture to Mercury commanding him to stop. Proserpina is on her knees, surprised in the act of gathering flowers: she turns imploringly to Minerva, while Pluto bends over and takes her in both arms. This is one of the few instances in which the subject is represented at the time when the maiden is surprised, not after her capture.—*Bull. d. Comm. arch.*, May.

*INSCRIPTIONS*.—*Inscription at the Sette Sale*.—The following important inscription has come to light: *Mag(istri) et flamin(es) montan(orum) montis Oppi(i), de pe[c]unia mont(anorum) montis Oppi(i), sacellum claudend(um) et coaequand(um), et arbores serundas c[u]raverunt*. It is the only written monument referring to the *mons Oppius*, to the ancient *sacella* of the *Sep-timontium*, and to the internal administration of the city before the regional division of the year 747 and the new institutions of Augustus. Hence, its great historical importance (pl. VIII). In the Republican period, when the city was divided into the four Servian regions, the inhabi-

tants of the old Septimontium were called *montani*, while those dwelling in the neighboring *pagi* were called *pagani*. The early religious rites were confined to the former, were *non populi, sed montanorum*. This inscription shows that the religious fêtes were regulated not only by the flamens but by the *magistri*, as heads of the *Compitalic* association, and that the inhabitants of each mount had a common fund for religious worship. The *sacella*, of which one is mentioned in the inscription, were open courts surrounded by walls and sometimes by woods, within which was an altar. There were four of these *sacella* on the Oppian mount, each having one *flamen*. The entire Septimontium contained twenty-four chapels divided into four groups. This inscription, of the last century of the Empire, records the restoration of one of these, the surrounding of it with a wall, the levelling of the ground about it, and the planting of trees inside.—*Bull. d. Comm. arch.*, May.

*Inscription of Virius Lupus.*—An inscription found in a very fragmentary condition gives for the first time some of the offices of that distinguished man, Virius Lupus, who was prefect of the city in 278–80. It reads: [ . . . Viri]o Lupo cl(arissimae) m(emoriae) v(iro) | [consul]i, praef(ecto) urbi, pontif(ice) d(ei) S(olis) | [iudici] s(acrarum) [co]gnition(um) | [per Asiam?] et per ori[e]ntem, praes(es) | [prov(inciae) Syriae] coeles et Arabiae | . . . ].—*Bull. d. Comm. arch.*, July.

*Inscription regarding the Tiber and the Bridge of Agrippa.*—On the left bank of the Tiber, behind the church of *S. Biagio della Pagnotta*, there came to light, *in situ*, a cippus of travertine, belonging to the series relating to the river-banks. The bridge of Agrippa is here mentioned for the first time, and its epigraphic and topographical importance is very considerable. It reads: PAVLLVS · FABIVS · (P)ERS[icus] | C · EGGIVS · MARVL · L[us] | L · SERGIVS · PAVLLVS | C · OBELL[ius] · S · RV . . . | L · SCRIBONIV[s] . . . | CVRATOR[es] [Riparum] | ET · ALV[us] [Tiberis] | EX · AVCTORIT[ate] | TI · CLAVDI CAESA[r]IS | AVG · GERMANIC[us] | PRINCIPIS · S · [C] · RIPAM · CIPPIS · POS[ita] | TERMINAVERVNT · A · TR[ans] · AR[ia] | AD PONTEM · AGRIPP[ae]. It shows, by the names of the four senators, which are quite new, that the college of four senators, presided over by a consul, renewed yearly, which had the care of the banks and mouth of the Tiber, which was instituted by Tiberius in 15 A. D., lasted up to Claudius, 34 A. D., the year of the consul Paullus Fabius Persicus. The inscription also indicates for the first time the exact site of the Trigarium, a part of the *Regio IX*, as being along the banks of the river. The *terminatio* made by Claudius extended then from the Trigarium to the *Pons Agrippae*. The mystery as to whether the bridge of Agrippa could be either the Ponte Sisto or the ruined *Pons Triumphalis*, was settled, shortly after the finding of the inscription, through the dis-

covery, by Sig. Borsari, of the ruins of a bridge 160 met. to the north of the Ponte Sisto. The superbly constructed fragments of the head and one of the piers, formed of great blocks of travertine, indicate the Augustan age. This seems to be the *Pons Agrippæ*.—*Not. d. Scavi*, 1887, pp. 322–27. Cf. R. LANCIANI's letter in *Athenæum*, Dec. 24.

**RUSELLAE** (near Grosseto).—*Archaic antiquities*.—Near the ancient Russellæ, a countryman discovered, in February, a tomb which, from the nature of the objects, must have been a rich one, strongly related to those belonging to the primitive Italic civilization. The arms, ornaments, horse-bits, and various utensils that constitute its contents have their counterpart in *tombe a pozzo* of the neighboring necropolis of Vetulonia, and in *tombe a pozzo* and a *cassa* of other related Etruscan and Umbrian necropoli (cf. Volterra, Tarquinii, and the *sepulcreti Benacci*). The bronze horse-bits are frequent in Umbria, but very rare in Etruria (two only from Tarquinii). The vases appear to have been much broken or of inferior value, as they were not preserved by the discoverers.—*Not. d. Scavi*, 1887, pp. 134–37.

**SYBARIS**.—*Proposed Excavations*.—The Italian Government, having at length determined upon the excavation of Sybaris, has appointed Professor Viola, the distinguished explorer of Tarentum and other South-Italian sites, to conduct the projected operations.—*Academy*, June 4.

**TARQUINII=CORNETO**.—*Excavations in the Necropolis* were resumed Feb. 22, 1887, beginning under the tomb of the *Kitharodos*. The tombs here were generally a *fossa*, though several were *tombe a corridoio*. That the two kinds of tombs were contemporaneous is evident from the objects found in them. The first tomb discovered was a *corridoio*, and opened to the south: with the skeleton were found a pair of the well-known spirals of bronze covered with gold, a cup of black bucchero, and a Greek lekythos. Six metres to the north was found a *tomba a fossa*: the skeleton had on two sides of the skull the bronze spirals, on the forearms large spiral bronze armlets. To one of the armlets were attached two bronze rings: about the breast were four fibulæ. Of the utensils found in the same tomb, two were hand-made, a little tazza with upright handle, and a rude *guttus* of coarse red clay: three orceæ and a kantharos of black bucchero were wheel-made. Of Greek vases there were found three lekythoi, and an orca with painted and scratched ornamentation. Twenty metres to the south, another *tomba a fossa* contained a large iron lance-head with its spiral bronze *πρόκης*; a smooth bronze cup; and a scarab inscribed with two quadrupeds; a local vertical-handled cup; four Greek lekythoi; three alabastra; three plates; and a salt-box. Five other *tombe a fossa* and one *corridoio* contained similar objects. At a distance of about 300 metres from the point where the excavations began, was found a *tomba a camera* in which there were two bronze mirrors with reliefs, one representing the group of Neop-

toleamos, Orestes and a Fury, the other (much damaged) a composition in which Dionysos is the central figure. In the same tomb was found a cylindrical cista resembling the well-known Palestrina cistæ, with three lion-claw feet, over each of which is posed a cupid. The cover is incised with palmettes. Its handle is formed by a seated female figure in the style of the figures on the covers of Etruscan urns. Three *thymiateria* and other utensils were in this tomb.—*Bull. Ist. arch. germ.*, 1887, 3.

**TODI.**—After a trial lasting four days, the tribunal sitting at Perugia passed yesterday (June 2) the following judgment with respect to the treasures found in the grave of an Etruscan lady at Todi, and described in the *Academy* of October 16, 1886: "Considering that Cardinal Pacca's edict of the year 1820 is still in force for the Province of Umbria, and that the Orsini Brothers excavated the tomb after the expiry of the permission granted to them, this court condemns them to a fine of 1,000 lire, together with all law charges, and confiscation of all the archaeological objects to the Royal Museum."—*Academy*, June 11.

**SICILY.**—**SELINOUS.**—*Akropolis.*—The excavations undertaken to bring to light the walls of the akropolis have already yielded important results. There are several circuits of walls communicating with each other by means of subterranean apertures which, singularly enough, have circular arches. These walls extend beyond the akropolis and are defended by advanced circular towers. The exact topography cannot be ascertained until the end of the excavations.—*Arte e Storia*, 1887, No. 17.

**SYRACUSE.**—*Sanctuary of the Nymph Kyane.*—At a place called the *Cozzo di Scanduria*, there have come to light walls and other remains that belong to an edifice, probably the well-known sanctuary dedicated to the nymph who gave her name to the neighboring *Fontana Ciane* (τῆς Κιάνης ἱερὸν: Diod., xiv. 72). The edifice was quadrangular and the walls built of tufa: two calcareous water-spouts with lion-heads of good Greek workmanship belong to the building: remains of columns also have been found. *Not. d. Scavi*, 1887, p. 380.

#### CHRISTIAN ANTIQUITIES OF ITALY.

*Agostino di Duccio.*—The least appreciated artist of the early Italian Renaissance is probably Agostino di Duccio of Firenze, pupil of Donatello, and sculptor not only of the well-known façade of San Bernardino at Perugia, but of the Cathedral of Rimini. In a recent number of the *Arte e Storia* (1887, No. 10), A. Venturi calls attention to an interesting work of his in Modena, where he executed a marble altar-front for the Cathedral: it is now built into the façade of the church. Its reliefs represent four scenes of the life of S. Geminiano. The inscription reads AVGVSTINVS · DE · FLORENTIA · F · 1442, and shows this to be the ear-

liest known work of the sculptor. It has all the characteristics of his more mature productions.

**AQUILA.**—*Società Abruzzese di Storia Patria.*—By the initiative of Marchese Giulio Dragonetti, a society is being formed in Aquila for the study and illustration of the history and monuments of the interesting province of the Abruzzi, which possesses many learned men capable of carrying out this work.—*Arte e Storia*, 1887, No. 17.

**BARLETTA.**—*A sculptor of the XII century.*—In the church of S. Andrea at Barletta, on a portal richly sculptured with figures of Christ, the Virgin and John the Baptist, and the four Evangelists, is an inscription to which attention has lately been called. It gives the name of the artist: + INCOLA · TRANENSIS · BCVLPSIT · SIMEON · | RAGVSEVS · DÑE · MISERERE. This sculptor of the twelfth century, **SIMEON OF RAGUSA**, is otherwise quite unknown.—*Arte e Storia*, 1887, Nos. 30, 32.

**BERGAMO** (near).—*Benedictine Convent of Pontida.*—This monastery, at which the famous league of Lombard cities against Frederick Barbarossa was concluded, has been sold at public auction. Among the buildings were a Gothic church, and a cloister built by Sansovino.—*Revue Critique*, 1887, 18.

**SAN GIMIGNANO.**—*Restorations in the Collegiate church.*—Domenico Fiscali, the well-known restorer of the frescos of the Campo Santo of S. Piero in Grado at Pisa, has lately been at work on a careful restoration of the important frescos by Taddeo di Bartolo (1393) of Siena which adorn the walls of the Collegiate church.—*Arte e Storia*, 1887, No. 30.

**GREZZANA.**—*Coins of Verona.*—An important find of coins with the inscription, *obv.*, ENRICVS, *rev.*, VERENA, was made at Grezzana, in the province of Trent. These are coins of the Emperor Henry, and are extremely rare, being related to those found last year at Vadena in the same province.—*Arte e Storia*, 1887, No. 24.

**ROMA.**—*A new periodical for the study of art and archæology* has been founded in Roma, under the direction of the well-known art-critic and writer Count Professor Domenico Gnoli. Its title is *Archivio Storico dell'Arte*, and it will probably be devoted mainly to the Middle Ages and the Renaissance.—*Arte e Storia*, 1887, No. 27.

*House of SS. Giovanni e Paolo.*—The discovery of this Roman house under the church of SS. Giovanni e Paolo was mentioned on p. 191. Further researches by Padre Germano have led to a discovery of the greatest importance. A third room was unearthed, 7 met. long by 4 met. wide, considered by Professor Gatti to be the *Tablinum* of the house. Its walls are covered with remarkably well-executed frescos; but the most remarkable circumstance is that, besides classic paintings of animals, hippocamps, country-scenes, and allegorical decorations, there are others of a *purely Christian* character. One represents Moses removing his sandals, similar

to a painting in San Callisto: the subject of another is the female *Orante* with hands raised, robed in a dalmatica, with a veil over her head and a necklace. It is the first time that frescos of a distinctly Christian character have been found in a Roman private house—hitherto, they have been confined to the Catacombs.—*Cour. de l'Art*, Nov. 25.

*Early Christian Sarcophagus with the Betrayal of Christ.*—Near the Porta Maggiore there came to light the front of an early Christian sarcophagus on which is carved the very rare scene of the betrayal by Judas. In the centre stands the youthful beardless figure of Christ; on his right, Judas approaches to give the kiss, bearing the money-bag in his hand. The accompanying crowd is symbolized by a figure on the left. The sculpture is of the time of the decadence in the second half of the fourth century.—*Bull. d. Comm. arch.*, May–July; *Not. d. Scavi*, 1887, p. 180.

*Sant' Agnese: early figure of Christ.*—On a fragment of a Christian sarcophagus of the fifth cent., found in repairing the side staircase of S. Agnese, was a bearded figure of Christ holding the book, and blessing. It is of especial importance as an early instance of the bearded Christ.—*Moniteur de Rome*, June 27–28.

**SICILY.—SYRACUSE.**—*Byzantine seal.*—On a Byzantine seal (recently purchased by the Museum of Palermo) is the name of a Byzantine duke of Calabria previously unknown, **EIRENAIOS SPADATARIOS**. The records of these Byzantine dukes of the VIII and IX centuries are extremely rare.—*Not. d. Scavi*, 1887, p. 124.

## SPAIN.

**THE MARTORELL PRIZE AND PREHISTORIC ANTIQUITIES.**—The archaeological prize of 20,000 pesetas founded by Don Martorell has been accorded by the city of Barcelona to the work of MM. HENRY and LOUIS SIRET entitled *Les premiers âges du métal dans le Sud-est de l'Espagne*. This work describes about thirty settlements and more than twelve hundred tombs of the neolithic period and the first bronze age, which have yielded fifteen thousand objects of exceptional importance for the early civilization of Spain.—*Muséon*, 1887, p. 366.

**CADIZ.**—The *Diario de Cadiz* has given interesting information regarding the discovery, in the neighborhood of Cadiz, of antiquities which are called Phœnicio-Egyptian or Punic. The excavations have been suspended until they can be directed by a member of the Academy of San Fernando. The discoveries illustrate the earliest history of the Spanish coast. Their character is not so clear as to make it certain, without careful examination, whether, or not, they belong to primitive Spanish industry. The *Diario* of March 12 contains a full description of the contents of the first two tombs found. By the well-preserved bodies were found several objects in iron:

among them, a dagger; a broken scarab with hieroglyphs; a large gold ring with an agate in the form of a scarab, on which was engraved a figure (said to resemble that of Osiris (?)), mounted so as to revolve; two large rings, one formed of gold spiral; fragments of a necklace; and a large number of other objects of gold, amber, *etc.* The *Diario* of March 15 and that of March 20 contain further particulars.

Several Spanish antiquarians consider the tombs to belong to the Roman period.—*Revista de Ciencias Historicas*, v, 1.

**CARMONA.**—*Prehistoric Tumuli and Roman Necropolis.*—Mr. GEORGE BONSOR writes to the *London Times* of August 23: "About six years ago a Spanish gentleman, Don Juan Fernandez, and myself purchased the two plots of land known as The Quarries and The Olive Groves (situated at a short distance west of Carmona) and commenced our excavations. Upon this site were some curiously shaped mounds which we afterwards found to be tumuli of a prehistoric age. Round these mounds the Romans had for centuries hewn, out of the rock, small chambers to serve as family-tombs. These are from four to five yards square and of the height of a man. In the walls are small cavities or niches for the cinerary urns, each of which last generally contains (beside the ashes of the dead) a coin, a mirror, a lachrymary, needles, a stilus and tabula, and a signet-ring. The walls are mostly painted in fresco or distemper in the Pompeian style, with representations of birds, dolphins, and wreaths of flowers. Near the entrance of each tomb is the crematorium, also hewn out of the rock, on the sides of all of which signs of fire are still visible. Up to the present time about 320 tombs have been discovered. They are disposed in groups, some around the tumuli, some near the Roman quarries and on both sides of the Roman roads, two of which ran from Carmona to Seville through the necropolis.

"This discovery shows, first, that, contrary to what is generally believed, the funeral pyre in this country was not made square, but oblong; the body, with the bier or feretrum on which it was carried to the necropolis being laid on it, the nails and other iron fittings belonging to the bier being still found among the ashes at the bottom of the crematorium: again, it shows the difference between a *bustum* or crematorium in which the ashes of the dead were left, and an *ustrinum*, or one from which the ashes of the dead were removed to be placed in the cinerary urns.

"The most important discoveries have been made near the Roman roads—namely, a columbarium and three large triclinia for the funeral banquets, with the peculiarity that in each a deep channel is cut all round the mensa into which the guests threw the libations. The largest funeral triclinium discovered contains three tables, with their couches round, the one for winter use being in a hall, another in the sun, and the third, for the summer, being in the shade. In addition to these, there is an altar, a tomb

with its cinerary urns, a kitchen, a bath, a well, and a sanctuary, in which is a stone statue. Last year, about 50 yards from this triclinium, we discovered a Roman amphitheatre, also hewn out of the rock. During the course of the excavations, numerous objects of interest were found, amounting to over 3,000 in number, among which are many inscriptions, fragments of statues, glass, marble, and earthenware urns, lamps and mirrors, rings and coins, and other valuable articles, all of which have been placed in a museum in the town specially arranged for them. The excavations are still being continued."—*Cf. London Times*, Aug. 13.

**ECIJA and ASTORGA.**—*Christian sarcophagi.*—In the *Boletín* of the Real Academia de la Historia for April, engravings from photographs are given of two early Christian monuments: one, a sarcophagus found at Ecija, of the fourth to sixth century, with representations of the Good Shepherd, of Daniel in the lion's den, and of the Sacrifice of Isaac, with the name of each personage in Greek above; the second, probably Gnostic, found at Astorga, has a triangular tympanum surmounting a square with an open hand in low relief. The tympanum and the palm of the hand are inscribed *Ἐκς Ζεὺς Σεράπης—Ἰαώ.*—*Academy*, June 4.

**MADRIDEJOS.**—*Roman antiquities.*—The discovery of Roman inscriptions, mosaics, and other objects, seems to prove the site to be that of the Roman settlement *Rodacas*, whose name is preserved in that of the neighboring stream *Ruecas.*—*Rev. de Ciencias Hist.*, v, 1.

**VICH (Valencia).**—*Sculpture.*—In the *Calle del Embajador* has come to light a basrelief which seems to have formed part of a tomb. The subject is Judas kissing Christ: it is the work of a good artist of the xv century. —*Rev. de Ciencias*, v, 1.

#### PORTUGAL.

*An Archaeological Review.*—A review devoted in great part to archæology has been lately founded at Lisbon, under the title of the *Revista archeologica e historica*. It is edited by MM. BORGES DE FIGUEIREDO and ALEXANDRE DE SOUSA, and appears monthly. In the first three numbers issued, the place of honor is given to ancient epigraphy. Some Roman inscriptions of Lisbon and Tuy are published by the editors, and Dr. Hübner has a paper on a series of inscriptions from ancient Balsa.—*Gazette Arch.*, 1887, Nos. 3-4: *chron.*, p. 12.

#### FRANCE.

**ARCHÆOLOGICAL BIBLIOGRAPHY.**—The bibliography of the historical and archæological works issued by French learned societies, undertaken by the Ministry of Public Instruction, some years ago, is in progress. The first volume, compiled by MM. de Lasteyrie and E. Lefèvre-Pontalis, com-

prehending the societies of the departments Ain to Hérault, is nearly ready for publication. A complete summary of the work has lately been issued by the *Comité des Travaux Historiques et Scientifiques* under the title of *Bibliographie des Sociétés savantes de la France*, par E. Lefèvre-Pontalis. —*Academy*, Oct. 29.

Prof. MASPÉRO has just completed the text of Mariette's *Monuments Divers*, which (as arranged between Mariette and himself) is entirely from his pen. With this important work, which will be given to the world with all reasonable promptitude, ends the colossal task which Prof. Maspéro undertook some sixteen years ago—the task of seeing the bulk of Mariette's works through the press. Eight years of collaboration with the living man have been followed by eight years of laborious editorial work consecrated to the memory of the departed *savant*; and there now remain but a few fugitive papers on Mariette's excavations at El Assasif in Western Thebes, on "Alexandria in the time of the Cæsars," etc., which will be published by Prof. Maspéro in the pages of the *Recueil des Travaux*. Only those who know the difficult character of Mariette's handwriting, the fragmentary and unfinished condition of many of his MSS., and the immense mass of documents which have had to be sifted, deciphered, completed, and reduced to publishable form, can appreciate the amount of self-sacrifice and devotion with which Prof. Maspéro has performed this onerous duty.

Prof. Maspéro's second memoir on the Royal Mummies found at Dayr-el-Bahari in 1881 is in the press, and will shortly be issued. He has also just completed a *Catalogue Raisonné* of the Egyptian collection in the Museum of Marseilles, which not only describes and explains the objects in their order as seen by the visitor, but is designed to serve at the same time as a practical introduction to the study of Egyptian archæology.

In the meanwhile, Prof. Maspéro's *magnum opus*—his long-promised history of Ancient Egypt—progresses slowly but surely. Begun before he accepted the position left vacant by the death of Mariette, it has long been arrested by pressure of official work in Egypt. Even now, we can scarcely hope to see the publication of the first part earlier than 1889.—A. B. E. in *Academy*, Dec. 3.

M. Quantin will shortly publish the long-promised *Dictionnaire de l'Ameublement et de la Décoration depuis le XIII<sup>e</sup> Siècle*, upon which M. HENRY HAVARD has been engaged during more than ten years.—*Athenæum*, Oct. 22.

RESTORATION and VANDALISM.—Among the churches at present being restored are those of Courcône (Charente), of Bonpère, of Saint-Léger at Saint-Maixent (crypt), of Parthenay-le-Vieux (Deux-Sèvres), and of Cravant. The early Norman church of Breteuil, built at the close of the XI century on the model of those at Caen and Fresnay-sur-Sarthe, is being thoroughly restored. The vaults of the three naves are being made over,

The uncovering of the walls, which had been whitewashed at the commencement of the century, has brought to light some interesting objects.

Two ancient towers have been destroyed at Vannes. The château of Dijon is to lose one of its towers, to make way for a straight boulevard. The Gothic church of Hermes, with its fine Romanesque bell-tower, is being demolished by the municipality. The famous Hôtel at Sens, one of the most interesting specimens of mediæval civil architecture in France, is to be sold, and its destruction is possible: M. G. Bapst, of the Société Nationale des Antiquaires, M. Tranchart, president of the Société de l'Histoire de Paris, and M. de Lasteyrie are seeking to prevent this.—*Revue de l'Art Chrétien*, 1887, pp. 258-59.

**PAINTED GOTHIC ALTAR-FRONT.**—In a late number of the *Revue de l'Art Chrétien* (1887, II), M. de Farcy makes known an interesting altar-front or *rétable* of painted wood, of the early XIII century, which belongs to his collection: it is all the more interesting on account of its rarity. The large figure of St. Peter, in the centre, has, on each side, four compartments, in two rows, in which are given incidents of his life. The figures are on a silver-gilt background.

**AMIENS.**—*New architect of the Cathedral.*—M. G. Durand has found a document dated from 1260 which mentions one of the architects of the cathedral of Amiens: *Magister Renaudus cementarius, magister fabrice Beate Marie Ambicanensis*. It has been hitherto considered that the architects between 1220 and 1280 were Robert de Luzareth and Thomas de Cormont and his son Renaud. The newly-discovered architect seems to come in before Renaud de Cormont.—*Revue de l'Art Chrét.*, 1887, p. 485.

**AUTUN.**—*Roman Mosaic.*—In the Faubourg St. Jean, a Roman mosaic, measuring twenty-five metres superficial, has been discovered. It was sixty centimetres below the surface of a kitchen garden, near the ancient ramparts of the city and a field entitled *Gaillon*, belonging to the Hospice d'Autun.—*Athenæum*, Oct. 1.

**BRIONNE.**—*Sarcophagus.*—In a stone sarcophagus, discovered at the depth of a metre, were found a skeleton, some coins, fragments of glass vases, a sword-blade and a bronze buckler. The tomb appears to be that of a Gallic warrior.—*Revue de l'Art Chrétien*, 1887, p. 255.

**CARNAC.**—*Expropriation of the Megalithic Monuments.*—The recent law on the preservation of historical monuments has been first seriously applied by a decree which pronounces the expropriation, in favor of the State, of the land containing the monuments of Carnac which it has not been possible hitherto to purchase. This will involve property at Menec and Kermario containing magnificent megalithic stones.—*Bull. Mon.*, 1887, p. 494.

**DAX (Landes).**—*Cathedral.*—Important excavations have been made in the garden of the cathedral. At first there were found, under the pave-

ment of the cloister which dates from the XIV century, three tombs of singular shape, each containing four iron bars and a gridiron: in one there was a coin of Edward III (1317-55). Under these tombs there came to light important substructures, which appear to have formed the circuit of the chapel spoken of in the charter of the Abbey of Divielle which was consecrated by bishop Maximus in 511 on his return from the Council of Orléans. Its materials were evidently used in building the third tomb. Numerous Merovingian sculptures were found, and even a stone bearing traces of wall-paintings. The cutting of these VI-century stones seems anterior to the XII century, and this would give an approximate date to the tombs, which were used from that time forward.

Substructures of the cloister have been found, as well as two tombs anterior to the XII century, also fragments of early altars.—*Revue de l'Art Chrétien*, 1887, II, pp. 213-14.

**DJON.**—*The Castrum.*—In digging under Saint-Etienne for the early crypt of this church erected in the IV century, the workmen found an important piece of the foundation-walls of the ancient *Castrum*, described by Gregory of Tours. It was under Aurelian that, in view of the weakness of this province, the population was obliged to confine itself to the Roman camp, which was then strengthened by these important fortifications. Built in haste, they include innumerable fragments important for art. This piece is no exception, and it contains material from buildings important for their dimensions and art.—*Revue de l'Art Chrétien*, 1887, p. 256.

**ENNENT.**—*Merovingian and Carlovingian tombs.*—Excavations made for the construction of the church of Ennent have led to the discovery of sixty-eight Merovingian and Carlovingian tombs, all Christian, and containing perfume-burners.—*Revue de l'Art Chrét.*, 1887, p. 485.

**LIENE (Aisne).**—*Mosaics.*—In the Villa d'Ancy at Liene, district of Braisne (Aisne), has been found a Gallo-Roman mosaic, 3 by 2 met., in which is represented a hunted stag. The remaining decoration is of a geometrical character, and the border is fine.—*Berl. phil. Woch.*, Oct. 22.

**LYON.**—*Discovery of an amphitheatre.*—MM. Lafon and Pierrot-Deseilligny have undertaken excavations on the hill of Fourvières which have led to the discovery of one of the two ancient amphitheatres of Lyon, that placed near the Forum and the Imperial Palace. M. Pierrot-Deseilligny has published a report on these excavations in the *Bulletin Monumental* (September-October, 1887). Commencing the excavations early in May with the idea that the walls that were being uncovered were those of a theatre, the excavators soon found that it was in reality an amphitheatre built (like those of Syracuse, Pola, and Fréjus) partly on the declivity of a hill, partly on flat land: those portions that are on the hill are the best preserved, while the others are irretrievably lost. As they

at present stand, the highest portion of the walls rises 20 met. above the level of the arena. Three concentric walls have been found. *The first* has appeared on a length of 41 met.: *the second*, 7.50 met. from the first, was discovered along an uninterrupted length of 34 met., and seems to have been joined to an accessory wall by a vault: *the third* is at a distance of 10 met. from the second; about 15 met. of it have come to light. There are radiating walls between these concentric walls. Only one trace of a passage has been found; otherwise the walls are solid. This amphitheatre has a considerable historical interest, as it is that in which the Christian martyrs of Lyon suffered.—*Cf. Revue Arch.*, July-Aug; *Revue Epig. Midi*, July; *Revue du Lyonnais*, July-Aug.

**MANTOCHÉ** (Haute-Saône).—*Gallo-Roman Tombs*.—In a field between Mantoche and Apremont are the remains of a Gallo-Roman necropolis in which discoveries have been made at various times for a number of years. The entire neighborhood, besides, is full of remains of Roman villas. M. Virot has uncovered a number of bodies with which were found glassware and pottery.—*Revue Arch.*, 1887, pp. 344-45.

**MUV** (Var).—*Ancient Cemetery*.—Baron de Bonstetten has discovered here an ancient cemetery, including funerary inscriptions.—*Revue Critique*, 1887, No. 26.

**PARIS**.—RECENT ACQUISITIONS BY THE LOUVRE.—The following purchases have been recently made.

1. *Egyptian Museum*. Report of M. Revillout. 1. A basalt dog, larger than life and remarkably true to nature. 2. An admirable head of the Early Empire (*cf. Gazette des Beaux-Arts*, 1887, p. 185), which may be considered one of the chefs-d'œuvre of the collection: the workmanship is very fine and sharp, and the features are full of life and energy, and equal to anything produced by the Italian Renaissance. 3. A royal head, very carefully executed: the monarch was certainly not an Egyptian but a European, probably even a Roman. 4. Several interesting terracotta figurines: these terracottas, imitated by the Greeks, are very rare in Egyptian art; to be especially mentioned are the upper part of a vase with a female head of common but very truthful expression; a youthful smiling royal head of the Saïtic period; a nude female figure treated with delicacy. 5. A charming small Saïtic statue, approaching in type the statue of Nechthorhib, at the entrance of the Museum hall: there is remarkable suppleness and modelling in the forms, and the figure is very graceful. 6. A lot of finely-executed small objects. 7. Important additions from an archaeological standpoint have been made: M. Cattani has brought back from his mission to Egypt many hieroglyphic, hieratic, demotic, Greek, and Koptic papyri and tesserae (of which there are thousands), furnishing most precious scientific information, as shown by the Report of M. Cattani in

the *Revue Égyptologique* (fifth year). Many of these were gifts, among which should also be mentioned a fragment of basrelief, probably representing a priestess of Tum, lord of Tuku or Succoth; a fragment of naos mentioning a hitherto unknown prince named Amenmes, the elder son of Thothmes I; several hieroglyphic stelai of the Early Empire and of the classic period—some of which are interesting, even artistically, and bear new archæological types; Greek and Arabic papyri; very interesting embroidered stuffs of the Koptie period; etc.

II. *Museum of the Middle Ages, the Renaissance, and Modern Times.* Report of M. Molinier. The new hall opened on May 10 is devoted provisionally to a certain number of sculptures and other works of art recently purchased or given—some very recently. The works are classified as follows: *Sculpture*. 1. Spanish stone-door, end xv or beg. xvi cent., in flamboyant Gothic style, surmounted by two figures in low-relief representing the Annunciation. 2. Large tomb-slab of grey stone of Jean de Cromois, abbot of Saint-Martin of Liège, who died in 1525: this finely executed work is by a Flemish artist strongly influenced by Italian art—in a style not before represented in the Museum. 3. The four cardinal virtues, marble figures for the support of a tomb or pulpit, of the Italian school of the xiv century: these four statues from Southern Italy will be useful for a comparative study of French and Italian sculpture. 4. The Virgin and Child, a basrelief of painted and gilt stucco by Donatello: it is the Virgin called the *Madonna dei Pazzi*, the marble original of which was purchased by the Berlin Museum. 5. An angel standing in the pose of the *Mannekenpiss*—a statuette in grey stone of the school of Donatello, in the style of the bronze reliefs of the *Santo* of Padova: both these works were purchased in Firenze. 6. Saint John, a marble bust by Donatello, bequeathed in 1885 by M. Alb. Goupil: it came from the *Ospedale degli Innocenti* at Firenze (engraved, *Gaz. des Beaux-Arts*, 1885). 7. Ferdinand of Aragon, king of Napoli, a marble bust formerly painted, to be attributed to the hand or school of an artist who came to France at the close of the xv cent., Paganino da Modena, called *Mazzoni*, who executed the Mortorio of Monte-Oliveto at Napoli and that of San Giovanni at Modena, as well as the tomb of Charles VIII. 8. The Virgin and Child, a marble basrelief, with mosaic background, by the Venetian school of end xiv or beg. xv cent.: a repetition of an earlier type very frequent at Venezia. 9. The Virgin and Child, a group belonging to the Venetian school of the xv century, of the same style and doubtless by the same artist as the Virgin at the *Madonna dell'Orto* in Venezia, attributed to Giovanni de Santis. 10. The Virgin and Child, a colossal basrelief of painted and gilt carton by Jacopo Sansovino, purchased in Roma (cf. W. Bode, *Italien. Bildh. d. Renaiss.*, p. 282). 11. Funerary mask in marble, from a French tomb of the xvi cent. 12. Mar-

ble medallion of Ludovico il Moro, of the Venetian school, close of xv cent. 13. David vanquishing Goliath, a bronze statuette, cast *à cire perdue*, which is a reproduction or imitation, of early-xvi cent., of the famous lost figure by Michelangelo which was at the Château de Bury.

Beside the sculptures are to be mentioned some bronze medals of xv and xvi centuries; some *plaquettes*; a silver chalice of the Spanish art of the end of the xii cent.; and a number of enamels of the xvi cent., including two which are the only known French enamels with a white ground.—*Gazette Archéologique*, 1887, Nos. 3-4; *chron.*, pp. 1-4.

*Greek and Roman Sculptures*: the following acquisitions have been made during 1886 and five months of 1887.

A colossal Dioskouroi, the torso of which was brought from Carthage by MM. Babelon and Reinach; the head, right leg, and the horse had been bought by the British Museum, but were given up to the Louvre: six headless male statues, one of which represents an Emperor: two statues of women: a crouching Aphrodite from Tyre, with traces of the hand of Eros (a repetition of the celebrated group): a marble statuette of Aphrodite from Sidon: archaistic head of Dionysos from the Peiraieus: head of a philosopher (Sokrates) from the Peiraieus: head of Augustus from Marseilles: from Athens, an archaic male head with long undulating hair and prominent eyes, in the style of the Apollon of Tenea; beside several torsos, heads, and other fragments of statues: two inscribed round altars from Athens: architectural fragments of an architrave, palmette, and sculptured ornament from the temple of Apollon Didymeus, and of an Ionic capital and ornament from the temple at Priene: two stelai with Greek inscriptions: a long inscription containing a decree of the inhabitants of Apollonia in honor of Aischrion, son of Poseidippos: two fragments of Greek and three of Latin inscriptions: and an Attic marble sepulchral vase ornamented with a basrelief of a man taking leave of a woman.—*Gazette Arch.*, 1887, Nos. 5-6.

MUSÉE DES GOBELINS.—*Koptic Tapestries*.—This museum has purchased a series of tapestries found in the tombs of a Koptic cemetery discovered in 1884 by M. Maspéro. They consist in fragments of costumes, bands adorned with flowers or fantastic animals. They are formed of a woollen thread passed through a *chaîne* of écreu linen, similar to the Gobelin manufacture. The earliest fragments reproduce ancient models: Perseus and Andromeda, a Centaur playing on the lyre, geometric ornaments, vases, plants, animals, grotesque figures; also ornamental flowers, chimerae, etc. The more recent represent Christ with the cruciform nimbus, Saint George on horseback, and saints with the nimbus. All these motifs are surrounded by a very elegant framework of Greek fret, interlaced patterns, etc. The colors are so fresh that they seem to be of yesterday. The blues, reds and

violets are remarkably brilliant. In this respect these early works are far superior to the Gobelins. They are five or six centuries earlier than any examples hitherto known.—*Revue de l'Art Chrét.*, 1887, p. 537; GERSPACH in *Gazette des Beaux-Arts*, Aug. 1887.

MUSÉE DE SÈVRES.—The *Chronique des Arts* says that the Musée de Sèvres has been enriched by the acquisition of a piece of mosaic of a kind unknown, until now, to the best-informed French experts. It was brought from the ancient Medersa of Tlemcen. M. J. Levet, a captain of engineers, having special knowledge of mosaics, recognized the interest of this relic, caused it to be removed from its ancient site, and presented it to Sèvres. Such being the case, a demand has been formulated that pupils of the great military schools should have imparted to them some "notions d'archéologie," in order that the army should be enabled to assist in enriching the national museums.—*Athenæum*, Sept. 24.

GALLIC CEMETERY.—The remains of a cemetery belonging to the age of the Gauls have recently been discovered in Paris, in the old Faubourg St. Germain, at the corner of the Rues Rocroi and Bellechasse. Fifty-two tombs have been found with skeletons, most of which are skeletons of women and children: only twelve are skeletons of men. Many weapons and implements, also, have been unearthed—swords, lances, shields, and bronze and iron instruments of all descriptions.—*N. Y. Eve. Post*, July 15.

PARIS (near).—*Gallie Cemetery of St. Maur-les-Fossés*.—At a meeting of the *Académie des Sciences*, M. BERTRAND read a very interesting report upon the Gallie cemetery recently discovered at St. Maur-les-Fossés, near Paris, by M. Ernest Macé, who has presented most of the objects discovered to the Museum of National Antiquities. These objects are identical with those hitherto found in the departments formed of that part of Gaul which Cæsar allotted to the Belgians. The tombs are dug to the depth of about 3 ft. 6 ins., and they vary in length from 6 to 7 feet, while in width they are from 2½ ft. to 3 ft. Most of the tombs had been walled round to a height of from 12 to 14 ins. to keep back the sand at the sides; and the body is placed immediately upon the sand and covered with a row of large flat stones to keep it down. In every case the bodies are laid with the face upwards, the sword in the right hand, fastened by a jointed iron belt near the head. On the right-hand side is the point of a lance, the handle of which is placed between the legs, having probably been broken as a token of mourning at the funeral. Among the other objects discovered is a sword in a good state of preservation, with the chain still attached to it. This sword is 32 inches long, the sheath being in iron, while the hilt and the guard are ornamented with three heavy nails meant to represent a sort of shamrock leaf. M. Bertrand states in his report that, though it is impossible to specify the exact date of these interments, there can be no doubt that the bodies are those of warriors of Gaul, armed exactly as the war-

riors of the Belgian provinces were at the time of the war of independence, while, having regard to the care taken in the arrangement of the cemetery, he comes to the conclusion that St. Maur-les-Fossés was an advanced post for the defence of Lutetia. M. Ernest Macé hazards the suggestion that the bodies are those of warriors killed during the attack by Labienus upon that city, but this theory is not spoken of by M. Bertrand, whether to confirm or reject it.—*London Times*, July 13.

**ROUEN.**—*Gothic Tombstones.*—In the Rue Saint-Lô, on the site of a church built, probably, at the beginning of the XIV century, three singular tombstones have come to light. The first represents a female figure with cap, with a greyhound at her feet, and lying under a trefoiled arcade. An angel descends bearing a crown, while a group of angels burn incense. The inscription reads: *Chi gist Mahaus du Chastelier, Dix Jesus Crist li puisse. Mortali namq. domo clauditur omnis homo.* On the second stone is a male figure, also under an arch, wearing the headdress of a "béguin": there are the same incense-burning angels, the same greyhound, etc., but the ornamentation is simpler. The inscription reads: *Ci gist Pierres du Mesnil quit trespasa. Proiez por lui.* It bears the date 1266, and seems about twenty years older than the former: both are in a wonderful state of preservation. They have been taken to the Museum in the Rue Thiers. The third tombstone also belongs to the XIII cent.: it is ornamented only in the upper part. The composition is similar to the preceding, with the addition, below, of the subject called "the triumph of the soul," often found on such tombs. The inscription is: *Hic jacet Adia Roscellin | . . corpus ejus requiescat in pace.*—*Revue de l'Art Chrétien*, 1887, p. 255.

**SAINT-GERMAIN.**—*Museum.*—Almost all the Keltic and Roman antiquities at the Cluny Museum have lately been removed to the Museum of Saint-Germain, including the very notable collection of Roman glass from the necropolis of Poitiers.

**SAINTES.**—*Roman antiquities.*—In demolishing the ramparts of the city there have been found a large number of fragments of Roman architecture and funerary inscriptions.—*Revue Critique*, 1887, No. 26.

**SAINT-SULPICE-DES-LANDES.**—*Frescos.*—In the church of Sainte-Marie a series of frescos of the XV cent. covering the entire walls of the church have been uncovered. Scenes of the Creation, the Garden of Eden, the Flight into Egypt, succeed each other without much order. Other paintings are by a better artist, e. g., the Annunciation, the Institution of the Eucharist, some figures of Saints, S. Christopher bearing the infant Christ, the betrayal by Judas, and Christ in glory.—*Bull. Mon.*, 1887, p. 501.

**SANXAY.**—*Preservation of the ruins.*—Some time ago a large amount was contributed from public and private sources for the purchase of the land on which these important ruins stand, discovered a few years since by P.

de la Croix, who has been appointed their guardian. At present a further subscription is being collected to keep them in good order and to protect them from further damage.—*Paris Temps*, Nov. 5.

**SENLIS.**—*Cathedral.*—The excavations for a new furnace have proved the interesting fact that the cathedral was built (1154–1191) without any transept, as shown by the continuous foundation-walls. The present disproportionately large transept was added, in about 1240, by breaking through the walls and displacing the piers: in the masonry that dates from this period are fragments of columns, capitals, and arcades.—*Revue de l'Art Chrétien*, 1887, p. 254.

**DISCOVERIES IN VENDÉE AND NEAR THE VILAINE.**—**NANTES** (near).—On the supposed site of the ruined Gallo-Roman city of the fifth century, **DURETIE** (commune of Fégéac) M. Maître has discovered baths and a military station. At **CHÂTEAU-MERLET** he has unearthed several foundations, especially those of a temple 21 by 16 met. The remains show a very rich style of decoration. The columns are of fine white stone of Poitou. At **SAINT-GEORGE** in North-Vendée, M. Dugast-Matifeux has found one of the Gallo-Roman wells that are occasionally discovered in this region. It was full of interesting archæological objects: fragments of vases, improperly called *Samian*, of fine, close, red clay covered with a coralline lustrous varnish. They are extremely varied in shape and decoration, and are covered either with elegant decorative ornamentation or with painted scenes of fête, sacrifice, hunting, etc. Notwithstanding the diversity of objects found in this well, there were no iron or bronze utensils or human bones to indicate a sepulchral destination.—*Courrier de l'Art*, Nov. 4.

#### SWITZERLAND.

**BERNE.**—*Cathedral.*—The Münsterbau Committee in Berne has entrusted the "restoration and completion" of the cathedral to the architect E. Steuler, who has undertaken to follow out the plans drawn up by Prof. Beyer, the architect who has so long been *Münsterbaumeister* at Ulm, where the works on the cathedral are now approaching completion. The late Gothic church was the work of the famous family of architects the Ensingers, who were employed for three generations in Strasburg, Constance, Ulm, and Berne. Prof. Rahn, in his *Geschichte der Künste in der Schweiz*, gives an account of seven members of this family, all of whom were more or less distinguished as architects in the fourteenth and fifteenth centuries—Ulrich, Caspar, Matthäus, Moritz, Moritz the younger, Vincenz, and Matthias.—*Athenæum*, Oct. 29.

**CHUR.**—*Bronze helmets.*—Two ancient Roman bronze helmets are reported to have been discovered near Chur, Switzerland. The inscription on one shows that the owner was Publius Cavidius Felix, and that he

belonged to the *centuria* of Caius Petronius; the inscription on the other gives the name of Numerius Paponius, of the *centuria* of Lucius Turetedius of Cohort III. Both helmets have been sold. It is to be hoped that they are not productions of the antiquity-manufacturing company recently discovered in Switzerland.—*Athenæum*, Sept. 10.

**GREAT ST. BERNARD.**—*Prehistoric granite altars.*—A journal of Friburg gives us the news that, not far from the summit of the Great St. Bernard pass, there have been discovered five large altars of granite, and various objects in stone, such as axes, knives, etc.—*Bull. di Palet. Ital.*, 1887, p. 168.

#### BELGIUM.

**HASTIÈRES** (Namur).—*Church.*—The works that have been carried on for some time at the church of the Priory of Hastière-Notre-Dame have been brought nearly to a close. There have been found underground the remains of two buildings anterior to the present ones: (1) a crypt, thought to be the first church of Hastières, built by Saint Maternus; (2) a second and much larger church, probably built by bishop Adalberon toward 945 A. D. The fine Romanesque church erected by abbot Rodolphus (1033-35) remains, with the exception of the choir which was rebuilt in the XIII century: the transept and aisles of the choir, which were demolished at the beginning of this century, have been rebuilt. The crypt is composed of three naves with three arcades and an apse: the old altar and two circular benches remain. Under the pavement have been found five stone sarcophagi of the Romanesque period. The ancient pavement of the choir is to be uncovered.—*Revue de l'Art Chrétien*, 1887, pp. 215, 260, 261.

#### HOLLAND.

**EXCAVATIONS.**—A circular of the Dutch Minister of the Interior invites all the burgomasters to inform the director of the museum of antiquities at Leyden of all the excavations that may be carried on in their respective communes, in order to prevent the loss of material precious for the ancient history of the country.—*Muséon*, p. 366.

#### GERMANY.

**ABUSINA** (mod. Eining).—The extensive excavations (see JOURNAL, I, p. 247; II, p. 96) at the Roman station of Abusina, on the Danube near Regensburg, have at length been concluded, and all the walls of the bath and principal buildings roofed with tiles for protection. Herr Dahlem, the Regensburg antiquary, has now proved conclusively that the building on the rising ground, described, when discovered, as the Prætorium, must have been the residence of the Quæstor.—*Athenæum*, Dec. 24.

**BERLIN.**—ACQUISITIONS OF THE MUSEUM DURING 1886.—I. *Græco-Roman Sculptures.* A late Greek plaster-capital on the front of which is a figure of Nike; a lion-head water-spout; fragment of a relief representing a young man; all from Tarentum. A left foot on a plinth, fragment from a copy of the Athena Parthenos, from Rome. A number of architectural fragments from the Ionic temple at Mesa, Lesbos.—II. **ANTIQUARIUM.** (1) *Terracottas.* Group of a young man carrying off a maiden, probably from Asia Minor; a kneeling Seilenos, which is a modified Tanagra copy of the Seilenos of the Dionysos theatre, Athens; a sketch for a votive relief; decorated fragments in shape of a discus: all from the Hoffman sale, Paris. Other minor terracottas from Asia Minor. (2). *Bronzes.* A hammered relief representing Venus Victrix surrounded by cupids, Roman period; moulded relief of Gorgon-head, from Neandreia in the Troad; statuette of running Artemis from Thesprotia. (3) *Vases, etc.* Archaic vase in form of reclining ram, Boiotian (?); a vase of Mykenai make from Lesbos; gold ring of Mykenai type; glass tankard found at Naples; eight ox-heads of lead, from South Russia.—*Jahrb. d. Arch. Inst.*, 1887, III, pp. 198–205.

**HEDDERNHEIM** (near).—*Discovery of a Mithræum.*—Frankfurt papers describe at length the discovery of a Mithræum, or *sacellum* dedicated to Mithras, on the site of the old Roman town near Heddernheim, not far from Frankfurt. The chapel would seem to have been about 10.8 metres (about 35½ ft.) long, by 2.55 metres (8½ ft.) broad. At the northern end was a sculptured group in relief representing the usual group of Mithras and the bull with the usual symbolical animals. At either side of this sculptured slab are two other reliefs, representing the two genii with torches. Usually the genii are sculptured on the same slab with the Mithras group; but in the present case they are on separate slabs. The whole work is very spirited, full of life and grace, and in excellent preservation. The right elbow is wanting in the Mithras figure, and the head of one of the genii. At the opposite end of the *sacellum* there is a species of altar of basalt, the top of which is sloped four-corner-wise, like a roof. One face has the inscription, *Deo invicto Mithræ*: the opposite face bore the relief of the torch-bearers: on another face is the eagle of Zeus holding the thunderbolt; under him is a hemisphere marked with meridian lines, and the word *cælum*: on the opposite side is a long-bearded man with an anchor and large shell, and the word *oceanum*. This is the third Mithræum discovered in the neighborhood of Heddernheim, a proof of how the worship and mysteries of this Eastern divinity had spread through the Western Roman provinces.—*London Times*, June 9.

**KÖLN.**—*Church of St. Severinus.*—On removing the whitewash in the choir of the St. Severinskirche, some frescos of conspicuous artistic value came to light. The finest are in the compartments of the vaults: the central

vault has a *Majestas Domini*, double life-size, on a blue ground. It is singular that the Saviour bears in his left hand a chalice instead of a book. In the two compartments on the right are the Virgin and St. John: the paintings in those on the left have fallen a sacrifice to the cleaning of past centuries. In style, these paintings remind one most of the figure of S. Dionysios in St. Cunibert and the Crucifixion in the Baptismal chapel in the same place, and they may be dated from the beginning of the last third of the XIII century.

Afterward was discovered a second large cycle of paintings adorning the five-sided concha from the pavement to the rosette-windows opened in the apse. In the central niche is a much-injured representation of the Crucifixion with the Virgin and St. John, and also St. Severinus and Cornelius. Below are seven kneeling figures, probably the donors, under which is a richly-clad knight in a coat of chain-mail and bearing a shield. Of the standing figures on each of the two sides, that of John the Baptist is alone recognizable. The date is fixed at about 1300 by the inscription *Rutgerus rayze* under the knight, with which the style of figures and architecture agrees.—*Kölnisches Volkszeitung*, March 25, Apr. 16. Cf. *Repert. f. Kunstwiss.*, 1887, No. 3, pp. 315-16.

**SCHLESWIG.**—*Runic Monument.*—The *Hamburger Nachrichten* reports the finding, in Schleswig, of a large stone with a Runic inscription. A new barrack is being built on the ruins of the old castle of Gottorp, erected in the XVI century, and in demolishing the old foundations the workmen laid bare this stone, in perfect condition. It stands about 120 centimetres (nearly 4 ft.) high, and is about a foot broad. It has on two faces an inscription in the usual characters, and the style of the writing is said to correspond with what has been found on three other similar stones found in Schleswig or the neighborhood. It is in the line of the dyke known as the Dannewerke, and probably covered a grave. The inscription has been partially deciphered, and is said to probably run as follows: *Osfrida made this mound, the daughter of Vinthingar, to Sigtrig, the King, her son, on the holy place.*—*London Times*, Aug. 30.

#### AUSTRIA-HUNGARY.

**FRÖGG** (near Rosegg).—*Tumulus.*—The Historical Society of Carinthia has been carrying on excavations here, and, after opening a number of tombs, with but poor results. But, in the woods, a large tumulus was opened, within which, two metres below the level, a great variety of objects were found: bronze ornaments; fibulæ; over fifty lead figures; and two thousand pearls.—*Mith. d. k. k. Oest. Mus.*, 1887, IX.

**LAIBACH** (Carniola).—Two Roman sarcophagi have recently been discovered at Laibach, the Roman Emona. Their date is said to be the second century B. C. If this be so, the find is of considerable interest.—*Academy*, July 9.

**OLMÜTZ.**—*Early Mediæval coins.*—A lot of over 2400 silver coins (*denaria*) found here date from the XI and XII centuries, and are mostly of the local Princes. Some bear the legend of S. Peter, others of SS. John, Nicholas, and Wenceslaus: the earliest date from Wratław II, Duke of Olmütz from 1055 to 1086, and the latest from the first year of Sobiesław I. Beside these fine and small *denaria*, there were some 400 larger coins of quite a different type: they appear to be Austro-Bavarian coins, partly from the Regensburg mint under the Bavarian dukes Welf I (1071–1101) and Welf II (1101–1120), and partly from the Viennese mint under the Austrian dukes Leopold III (1082–96) and Leopold IV (1096–1107). The inscriptions are generally illegible. These coins seem to prove (1) that the monetary independence of the province was illusory; (2) that the cult of Cyril and Methodius had very much waned.—*Mith. d. k. k. Oest. Mus.*, 1887, x.

**PODGRADJE** (Dalmatia).—On June 6, excavations were commenced on the site of the old Roman city of Apenna, at Podgradje, near Benkovac. The Governor of Dalmatia was present, as these excavations have been undertaken by order of the Government.—*London Times*, June 8.

**SACRAU** (Silesia).—*Prehistoric tombs.*—An interesting discovery was recently made at a village called Sacrau, a little east of Breslau. Three graves of stone were found, with remains of weapons, wooden and earthenware jars, ornaments in bronze and silver, *etc.*, especially some curious fibulæ. In the grave last opened were a golden necklace, some small rings, a gold fibula, and a gold coin, IMP CLAVDIVS AVG. The graves have been ascribed to the Romans. A trade-route of imperial times certainly ran across Silesia, connecting the Baltic and the Mediterranean, and Roman coins, *etc.*, mark it all the way.—*Academy*, Aug. 20.

**STRIEGAN** (Silesia).—A further discovery of antiquities, consisting of gold ornaments, costly vessels, *etc.*, belonging to the early Roman times has been made at Striegan in Silesia.—*London Times*, July 28.

**TRIESTE** (anc. **TERGESTE**).—*Mosaics.*—Some interesting archæological discoveries have lately been made at Trieste. Last Saturday, four beautifully preserved mosaic floors were laid open at Barcola, near Trieste, at a depth of only one metre. The floors measure four square metres each, and are apparently the remains of a patrician's villa. The excavations are being continued under the superintendence of Professor Puschi, director of the Municipal Archæological Museum.—*London Times*, Nov. 2.

#### SCANDINAVIA.

Prof. GEORGE STEPHEN writes from Copenhagen of an important find lately made near Bergen, in Norway. A bone stylus with a Runic inscription was discovered, together with a little book in red Latin letters, evi-

dently written with the stylus. The date seems to be the twelfth century.—*Academy*, July 23.

The results of M. DU CHAILLU'S Scandinavian researches will be published this winter by Mr. John Murray, in two volumes, with more than one thousand woodcuts. The book is entitled *The Viking Age: the Early History, Manners, and Customs of the Ancestors of the English-speaking Nations*, illustrated from the Antiquities discovered in Mounds, Cairns, and Bogs, as well as from the Ancient Sagas and Eddas.—*Academy*, Oct. 29.

#### GREAT BRITAIN.

**ENGLAND.—CAMBRIDGE.**—We are glad to record that the Rev. G. F. Browne, of St. Catherine's College—whose studies have thrown so much light upon the obscure subject of early sculptured art in England—has been elected to the Disney professorship of archaeology at Cambridge, vacant by Prof. Percy Gardner's removal to Oxford. Prof. Gardner's introductory lecture on "Classical Archæology, Wider and Special" has just been published in pamphlet form by Mr. Henry Frowde.—*Academy*, Dec. 3.

**CHESTER.**—*Recent discoveries and age of the walls at Chester.*—It would appear that a further portion of the Roman wall of Chester together with quite a number of Roman inscribed and carved stones have recently come to light. English antiquarians are making the most of the fact, and the columns of the London *Academy* have for four months been flooded with letters on the subject. It seems that these antiquarians disagree as to the age of the walls, those who deny them to be Roman sustaining that they were put together for the great part by the Puritans in the *seventeenth* century. A similar discussion has been raised about a relief considered by some to be Roman, while others see in one of the figures "an ecclesiastic in canonicals," and consider it to be a *Gothic* work of "*circa* the fourteenth century." We quote from Mr. Brock's letter in the *Academy* of Sept. 17. "The walls have been found to be constructed of massive blocks of sandstone, put together so neatly, without mortar, that I failed in one place to insert a penknife-blade between the joints. The thickness is about eight feet at the base. The blocks are fairly-well squared and are of enormous size, some being more than five feet long. This construction has been revealed by excavation on three sides of the city, while it has been always visible at other points. Uniformity of design and execution has, therefore, been shown to exist generally in the construction of the wall, indicating that it was the work of one people. I say the Romans; but your correspondent, elsewhere than in the ACADEMY, has said: some Puritan builders of the XVII century for one portion, and during the Edwardian period for another. I understand, however, that he allows the stones to be Roman, but shifted in position from elsewhere at the periods named. . .

No less than seven inscriptions have already been found, which are given in full by Mr. Frank H. Williams in the *Chester Courant* of September 7.

"While I write, notice of another has reached me. In addition, there are six or seven portions of bas-reliefs, either with processions of figures, or single figures, one bearing traces of colour. There are also twenty moulded stones, portions of architectural members, such as cornices, copings, a keystone of an arch, a length of an architrave, etc. These have formed parts, originally, of various buildings, evidently of moderate size, and no mortar has been used in their beds any more than when applied to their second use as walling in the city-rampart. The whole of this remarkable mass of inscriptions, sculptures, and moulded work, has been found entirely within the moderate area of the wall operated upon by Mr. Jones, the city-surveyor, in showing the thickness of the wall for effecting some much-needed repairs to a portion of its extent."—*Cf. Academy*, Sept. 3, 24; Oct. 8, 15, 22; Nov. 12, Dec. 3, 17; and paper "on the walls of Chester," read before Brit. Arch. Assoc., Nov. 16, by the President, Sir J. A. PICTON.

The Chester authorities have kindly sent the sculptured stone found in the city-wall, on which so much controversy has arisen, for exhibition at the Society of Antiquaries, before whom Mr. W. de G. BIRCH, will read a paper at an early date (*Athenæum*, Dec. 17). Fellows of the Society and their friends will thus have an opportunity of inspecting the stone for a short time while it is in London. Our readers will remember that Mr. Thompson Watkin maintains that the sculpture is mediæval, whereas Mr. Birch claims a Roman origin for it.—*Academy*, Nov. 26; cf. letter of W. THOMPSON WATKIN in *Athenæum*, Dec. 10; in *Academy*, Dec. 31.

*New Inscriptions.*—A number of inscriptions have been found in the more recent excavations, but as yet have not been allowed by the authorities to see the light.—*Academy*, Dec. 31.

**HARROW.**—*Sir Gardner Wilkinson's Collections.*—Readers of the late Sir Gardner Wilkinson's *Manners and Customs of the Ancient Egyptians* may remember his frequent allusions to antiquities in his possession. Twenty years ago he gave this important collection to Harrow School, together with his large collection of Greek, Etruscan, and Roman antiquities. They have fared badly there, having been packed away in the library in a case that was not air-tight in front, and rested against a damp wall behind. But, last year, a museum was built at Harrow for the school, and the collections were removed thither. Since then, the Egyptian antiquities have been catalogued by Mr. Wallis Budge, of the British Museum, and the rest by Mr. Cecil Torr; and these printed catalogues can now be obtained from Mr. Wilbee, the bookseller at Harrow. Under Mr. Budge's direction, all the Egyptian antiquities have been repaired, mounted, numbered, and arranged for exhibition. But a further vote of money will be

needed before all the collections can be placed in a satisfactory state.—*Academy*, Nov. 5.

**LONDON.**—*Old Roman Wall.*—At a meeting of the British Archaeological Association (May 18), Mr. Loftus Brock reported the discovery of a portion of old London Wall, which had served partly as a foundation for the houses on the east side of Wormwood Street, Aldgate, now removed. The wall is of fine Roman work, having a chamfered plinth of dark brown ironstone, various bonding courses of bright red brick, and facework of squared Kentish ragstone. Nearly opposite the Synagogue in Bevis Marks the foundations of a circular bastion have been met with. It is not bonded into the wall, showing that it is of later date. It is formed almost entirely of worked freestone evidently taken from other buildings, as if for its erection in haste.—*Athenæum*, May 28.

*Excavations.*—The excavations proceeding in Piccadilly on the site of the new premises of the Junior Travellers' Club have brought to light many interesting objects. The houses which are built on that portion of the thoroughfare have for their foundations a series of well-formed arches at a depth of about sixteen feet from the surface. In piercing some of these, great difficulty was experienced on account of the toughness of the substance of which they are constructed. This having been overcome, a series of subterranean passages, apparently connected, was discovered. These were full of foul gases, and contained a vast quantity of rubbish, among which have been found numerous articles of interest. Not the least interesting is a red-granite tomb dated 1509, some bronze armor, several fowling-pieces, a richly embossed lamp, and a large quantity of vellum manuscripts. The vaults have been only partly explored, and further discoveries are anticipated.—*Academy*, Sept. 3.

**BRITISH MUSEUM.**—*Recent acquisitions.*—From the list published in the *Classical Review* (1887, pp. 117–19) we make the following enumeration of recent acquisitions.

*General acquisitions.*—*Marbles.* 1. Head and forehead of horse found at Civita Lavinia (ancient Lanuvium) in course of excavations carried on by Sir J. Savile Lumley; it appears to have formed part of a chariot group with four horses: spirited Græco-Roman work. 2. Portrait-head of Marcus Brutus as a young man; from Rome. 3. Portrait-head of the younger Drusus; from Kyrenia, Kypros. 4. Torso of Cupid bending bow; Græco-Roman work. 5. Stele of fourth-century Athenian work, with relief representing a sepulchral vase (amphora) supported by a winged sphinx which faces the spectator, and whose body is heraldically repeated on either side. On the vase is sculptured in relief a parting scene between two warriors, Ἀρχιάδης Ἀγρούσιος and Πολεμόνικος Ἀθμωνεύς.—*Inscriptions.* Two marble fragments of Greek inscriptions from Erythrai.—*Bronzes.* 1.

Right leg of a colossal bronze statue, which had been broken away somewhat above the knee. It belongs to the best period of Greek art, and is illustrated in *Journ. Hell. Stud.*, VII, pl. lxix. 2. Fragments of drapery and armor from same statue (?) as preceding. 3. Four bronze oinochoai, from Galaxidi near Delphi.—*Terracottas*. 1. A series of fragments of painted sarcophagi, from Klazomenai, with archaic designs like those of the black-figured vases. 2. Mask of a satyr, from Samos; of thick red terracotta, pierced at nostrils, a very interesting specimen: the type is that of the sixth-century so-called "Chalcidian" satyr, with long carefully plaited beard, horse's ears, squat nose, and eyes and bushy eyebrows turned upward. 3. Vase in the form of a camel kneeling, with panniers between which is the mouth of the vase.—*Vases*. 1. Bowl of drab ware with brown linear ornaments, exactly similar to *Myk. Vas.* No. 80; said to come from Saqqarah. 2. Etruscan cup of black ware (form of *Berlin Vase Cat.*, No. 150, without stem) with incised design and satyric mask in relief.

*Department of Coins*. 1. The most important acquisition was a selection from the collection of the late Mr. Whittall, of Smyrna, of ninety specimens from a collection of early electrum coins of the Ionian coast, struck between the sixth and fifth centuries, including many types quite new and unpublished: these will shortly be published by Mr. Barclay V. Head in the *Numismatic Chronicle*. 2. A series of coins noticed in *Naukratis* (I, pp. 63-9), and published in the *Numismatic Chronicle* (1886, pl. 1).

*Department of Greek and Roman Antiquities*. The trustees have acquired the contents of an Etruscan tomb of exceptional interest, recently discovered at Chiusi; the most important object being the large terracotta sarcophagus which has been described in the *JOURNAL*, vol. II, p. 482, and vol. III, p. 180. For details, especially for a description of smaller objects, such as gems and coins, the reader is referred to the various numbers of the *Classical Review*.

A kriophoros and a seated ram in terracotta (Beirût): a terracotta statuette of Eros (Babylonia): Karpachos vases noted in Furtw. and Loeschke, *Myk. Vas.*, p. 83: Assarlik antiquities: three Mykenaian vases found near Pothia (Kalyrna): a bronze Etruscan figure of a running female on a flower: a fine series of twenty-six moulds for terracotta figures (Tarentum): a lekythos with Mænad (?) (Tarentum): large hydria with friezes of warriors, horsemen, etc., in so-called Chalkidian style (Tarquinii = Cervetri): small oblong bronze plaque with two panels, each having a pair of nude figures, archaistic.—*Class. Review*, 1887, pp. 249-50.

*The two fine terracotta vases from Kypros* which we described lately as in the charge of the Department of Greek and Roman Antiquities, British Museum, have now been definitely purchased, together with the silver ornaments mentioned by us at the same time, and an important archaic marble torso of a statue which stood outside the tomb in which these articles were

found. Among the silver ornaments discovered inside the tomb was a silver coin of Idalion, dated c. 520–500 B. C., which would do for the date of the statue. At a meeting of the *Hellenic Society*, Oct. 20, Mr. MURRAY read a paper on these two vases. They were found in recent excavations on the site of the ancient Marion, and both undoubtedly were of Athenian origin. The older was an *alabastron*, with female figures finely drawn in black on a creamy surface. The scene was of a Dionysiac character, and the painting was signed by an artist PASIADES, a name hitherto unknown. The second vase was a *lekythos*, with red figures on a black ground, but with accessories of white color and gilding. The figures represented were Oidipous, the Sphinx, Athena, Apollon, Kastor, Polydeukes, and Æneas, and the subject, Oidipous putting an end to the Sphinx after she had thrown herself down from her rock, on the solution of her riddle. The coloring seemed to Mr. Murray to suggest an attempt on the part of the painter to reproduce the effect of a chryselephantine statue. Mr. Murray was inclined to fix the date at about 370 B. C.—Mr. C. SMITH remarked that the interest of the vases lay specially in their coming from Kypros, and dwelt upon the importance of working out so rich a mine.—Mr. WATKISS LLOYD argued that a column in the second vase, which Mr. Murray had considered to indicate a temple, was more probably the column on which the Sphinx is ordinarily seated in vase-paintings.—Mr. J. T. CLARKE remarked upon the close relation between Athena and the Sphinx, which might be noticed in Asia Minor and elsewhere, and was certainly older than the myth of Oidipous. Hence, no doubt, her appearance on the helmet of the Parthenos at Athens.—*Athenæum*, Aug. 13; Oct. 29.

Mr. A. W. FRANKS has presented to the British Museum a most remarkable coin lately received from India. It is a *decadrachm* of the *Bactrian series*, the first ever met with, and bears, on the obverse, a horseman charging with his lance an elephant, on whose back are two warriors; and, on the reverse, a king or Zeus, standing, holding a thunderbolt and a spear; in the field is a monogram composed of the letters A B. The obverse records some victory of the Greeks over the barbarians, and the reverse may be a representation of Alexander the Great. The coin evidently comes from the district of the Oxos, and was struck about the middle of the second century B. C.—*The Evening Post* (N. York), Aug. 19.

Mr. JESSE HAWORTH, of Bowdon, Cheshire, owner of the famous *throne-chair of Queen Hatsu*, or Hatshepsu (XVIII Egyptian dynasty), has munificently presented this unique royal relic to the nation. The throne-chair has, we understand, arrived at the British Museum.—*Academy*, Dec. 3.

*Changes*.—On Monday next the public will be re-admitted to the old Print-Room in the British Museum, which has been handed over to the Department of Greek and Roman Antiquities, and employed by Mr.

Murray to house a considerable number of antique *stelæ*, fragments of many kinds, fronts of Roman sarcophagi, and rectangular sepulchral vases of marble. Of the last-named class the department possesses an unusual number, no fewer than fifty, and nearly all of them noteworthy on account of the excellence of their carving or the interest of the inscriptions upon them. The larger *stelæ* have been sunk into the walls facing the windows, the sarcophagi stand at one end of the room, the remainder of the objects being placed upon the floor in groups. The huge torso from Delos, removed from the Phigaleian Saloon, has been placed between two of the windows. In the north wall is inserted a very fine and boldly carved votive monument erected in honor of Lucius Antistius and his wife Antistia Plautia, by their freedmen Rufus and Anthus, in gratitude for their goodness. It is an extraordinarily vigorous and striking example of Roman carving of two heads in the highest alto-relief, of full life-size, and sunk in very deep circular recesses, which are shaped like scallop shells, the rays of the shells being distinct behind the heads; the hinges of the shells are fully marked in front. Each recess is bordered with a laurel-wreath. Below is the dedicatory inscription. The remarkably animated expressions, the lifelike pose of the heads, and the general *vraisemblance* and spirit of these sculptures compel attention. Like nearly everything of the kind in the room, this monument has been for a long time unseen. Brought from the cellar where it has lain since it was bought at Lord Bessborough's sale in 1858, it has the attractions of a newly discovered treasure.

The papyri which were hung in long glazed frames against the walls of the staircase at the end of the Egyptian Saloon have been removed to make room for the exhibition of a number of mosaics, chiefly from Halkarnassos and Carthage, which have long been reinterred in the basement of the building. The papyri have been framed in convenient lengths, which will be stacked in racks, and thus made available for examination by students. This improvement is due to a suggestion of Dr. Bond.

A great improvement is being carried out in the arrangement of the Greek and Etruscan vases in the upper story of the Museum. They are being grouped topographically. This practically involves their nearly exact chronological arrangement, and offers quite new and very suggestive aid to the student desirous of appreciating fairly the characteristic styles of the individual artists. A very precious group of vases has been made by bringing together all the signed instances. The beautiful little vase shaped like an *alabastron*, which we described some time since, has been placed in a detached case in one of the rooms.—*Athenæum*, Oct. 8.

Mr. PERCY GARDNER has been elected to the chair of archæology at Oxford, vacant by the transfer of Prof. Ramsay to Aberdeen. We understand that Mr. Gardner will resign not only his post in the medal room

at the British Museum, but also the Disney professorship at Cambridge, which he has held since the resignation of Prof. Babington. The department of coins in the British Museum has recently suffered another loss in the withdrawal of Mr. C. F. Keary.—*Academy*, Aug. 20.

**SOUTH KENSINGTON MUSEUM.**—*Koptic Embroideries.*—A descriptive catalogue of the collection of tapestry-woven and embroidered Egyptian textiles recently purchased by the South Kensington Museum has been compiled and will be shortly issued. The introduction, briefly dealing with the history of those specimens made between the first and ninth centuries A. D. at Akhmim, in Upper Egypt, has been written by Mr. Alan Cole, who for the last two years has been engaged in writing a catalogue of the tapestries and embroideries in the South Kensington Museum. It is only recently that these interesting textiles have come to public notice. Great interest is at present excited in them, as they are the earliest yet discovered, and collections of them are being formed (*cf. Letter from Roma*, p. 392; and *Musée des Gobelins*, in *News*, p. 490).—*Athenæum*, July 9.

**OXFORD.**—On Tuesday last, Convocation at Oxford voted the following grants: £250 for removing the Arundel marbles from the Bodleian to the University Galleries, where they will be under the charge of the Professor of Archæology; £730 for additional accommodation at the Bodleian Library and the Radcliffe Camera; £500 for building a lodge for the caretaker of the new Clarendon Laboratory; and £1200 for continuing the arrangement and cataloguing of the Pitt-Rivers anthropological collection.—*Academy*, Dec. 3.

*The Evangelistarium of St. Margaret of Scotland.*—The Bodleian Library purchased at a sale at Messrs. Sotheby's, on July 26, a small volume described in the catalogue as "Quatuor Evangelia, sec. XIV." This is now found to be the Evangelistarium, or portions of the Gospels recited during the Mass, which belonged to St. Margaret, Queen of Scotland (*ob.* A. D. 1093), the grand-daughter of Edmund Ironsides and mother of Matilda, the wife of Henry I, and the foundress of Dunfermline Abbey. It is beautifully illuminated with four full-page pictures of the Evangelists, in the English style of the first part of the XI century. From a passage in the life of the Queen, by Bishop Turgot of St. Andrews, compared with an inscription in the volume, it is clear that this very book was believed to have been the subject of a miracle, in having been immersed in a river for a considerable time without receiving injury. The MS. was subsequently in the possession of Lord William Howard of Naworth, who gave it its present binding. Prof. Westwood considers the style and ornamentation of this codex to be of the same period as the Canute Gospels in the British Museum (*Royal MS.*, I. D. 9), that is, early in the XI century. He has no doubt that it was written and painted in England; but few distinct-

ively Anglo-Saxon forms of letters are found, except in N, where the first perpendicular stroke is continued below the line, and the cross stroke is horizontal and very low. In general, the writing is fine Caroline minuscule. The gold is not burnished, but consists of thick gold-leaf laid on the parchment, and is either dull in tint or, where brighter, of a reddish color (*rutilabat*). Beneath the figure of St. Luke is a representation of the earth as a rugged surface. St. Mark and St. John are represented as bearded.—*London Times*, Aug. 5; *Academy*, Aug. 6, 20.

**SOUTH SHIELDS.**—*Roman Patera.*—ROBT. BLAIR writes, from South Shields, to the *Academy*, Sept. 25, "A few days ago I purchased, from the finder, a fine Roman *patera* of bronze, six inches in diameter. It had been found at low-water mark on the Herd Sand, South Shields—a stretch of sand, dry at low tide, on the south side of the Tyne. The handle is missing, but the shield-like outline where it was affixed remains. In the inside of the saucer-shaped vessel and around a central boss is the inscription, APOLLINI ANEXTIOMARO MA SAB, which Prof. Hübner, in a note on the subject to be read at the next meeting of the Newcastle Society of Antiquaries, expands *Apollini Anextio Maro M(arcii) A(ntonii) Sab(ini servus)*. APOLLO ANEXTIUS occurs for the first time. He considers it a local divinity like Apollo Maponus, etc."—*Cf. Academy*, Oct. 8, 15.

**WALES.**—At a meeting of the Society of Antiquaries of London, held Dec. 1, Mr. J. WILLIS-BUND, as Local Secretary for South Wales, read a report on various archaeological discoveries in his district, principally on the excavations at Strata Florida Abbey, and his own researches amongst the Roman remains about Llanio. He also spoke in strong terms of the great destruction of ecclesiastical and other remains now going on in South Wales.—*Athenæum*, Dec. 10.

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## AMERICA.

### UNITED STATES.

**EGYPT EXPLORATION FUND.**—*Donation of Egyptian Antiquities to the Museum of Fine Arts, Boston; and to Chautauqua Union College.*—At the fifth annual meeting of the Egypt Exploration Fund (London, Dec. 22), Miss AMELIA B. EDWARDS, the hon. secretary, after a lively recognition of the generous support given to the Fund by Americans, stating that the American subscription was, this year, equal in amount to the English, moved that, in addition to minor objects, the following works of sculpture should be presented to the Museum of Fine Arts, Boston, U. S. A.: (1) a seated statue, of heroic size, of Rameses II, in black granite, found in 1885 at Tell Nebesheh (the site of the city of Am); (2) a headless black granite

sphinx, of the Hyksos period, formerly inscribed on the chest with the ovals of a Hyksos king, and re-engraved with the ovals of Rameses II; being also inscribed with the names of various other kings, including that of Setnekht: this sphinx was likewise found at Tell Nebesheh. (3) A squatting statue in black granite of the style of the XII dynasty, reworked about the head, and inscribed with names and titles of Prince Mentuherkhopesh, "General of Cavalry of his father," King Rameses II. This very interesting piece was found during the present year at Boubastis. (4) A selection of Greek vases from Naukratis.

The resolution was seconded by Mr. J. S. COTTON, who said that he performed this office with especial sympathy, because of his intimate knowledge of the intelligent treatment of learned subjects by various American newspapers. He would, however, name only three: *The Nation* of New York, *The Literary World* of Boston, and *The Critic* of New York. Mr. Cotton then referred to the *American Journal of Archæology* and the *American Journal of Philology*, which he defined as being of a higher order of merit than any publications bearing similar titles in Great Britain. The American School at Athens had preceded the British School; and the work of the American Archaeological Society, and of the American explorers along the coast of the Mediterranean, were in every sense an honor to the United States. The motion was carried unanimously.

Mr. WILLIAM FOWLER then moved: "That a selection of Egyptian and other antiquities made by the Committee be presented to the Museum of Sidney, N. S. W.; the University of Chautauqua, in the State of New York, U. S. A.; the Ashmolean Museum, Oxford; and other museums." Mr. Fowler dwelt in terms of warm appreciation upon the generosity of the American subscribers to the fund. The Rev. W. MacGregor, local hon. secretary for Tamworth, seconded the resolution, which was passed unanimously.—*Academy*, Dec. 31.

WASHINGTON.—*A study-collection of casts of Babylonian and Assyrian Antiquities in the National Museum.*—The National Museum at Washington, in association with the Johns Hopkins University, has undertaken the formation of a study-collection of casts of Babylonian and Assyrian antiquities; and the Museum is ready to make facsimiles and casts of such antiquities. At first, will be obtained reproductions of Assyrian antiquities preserved in this country. The Johns Hopkins University will attend to the arrangement and cataloguing of the Assyrian collection in the National Museum, under the supervision of Dr. Paul Haupt, Professor of Shemitic Languages, and of Dr. Cyrus Adler, assistant in the Shemitic courses, who will also coöperate in the work of securing the loan of objects to be copied, and of forming the collection.—*Johns Hopkins University Circulars*, Jan. 1888.

A. L. FROTHINGHAM, Jr.


## SUMMARIES OF PERIODICALS.


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ATTI DELLA SOCIETÀ DI ARCHEOLOGIA E BELLE ARTI PER LA PROVINCIA DI TORINO. 1887. No. 1.—A. FABRETTI, *Proceedings of the Society, 1883-86*. An introduction refers to the restoration of the ancient gateways of Susa, to the excavations at Castelletto Ticino (*cf. News of JOURNAL*, I, pp. 234, 439), at Fontanello and other places, especially in view of the additions to the museum of Torino.—VITTORIO SCATI, *Studies on the Antiquities of Acqui*. The writer identifies Caristo, the capital of the Ligurian tribe of the Statielli, which was captured and destroyed in 172 B. C. by the consul Caius Popilius, with the present city of Acqui. It is the strategical centre of their territory, being at the mouth of two valleys and in the midst of several others. It was called by the Romans, after its destruction and reconstruction, *Aquae Statiellae*. Ancient monuments that previously existed and discoveries of antiquities made in preceding centuries are mentioned, and, finally, the excavations made during the last few years are described. The tombs found were of the Roman imperial period, and contained only pottery of no value. The only ancient monument that remains standing is the Roman aqueduct. The writer insists on the great importance of Acqui in Roman times, as shown by the Peutinger Table, and from its position at the head of three great Roman roads.—G. CLARETTA, *Research in Torinese antiquities*.—E. FERREIRO, *The Civic Museum of Susa*. At the close of 1884, the Municipality of Susa approved the institution of a Museum of antiquities, fine-arts, and natural history, proposed by Professor Ugo Rosa, who was appointed its director. It is to illustrate mainly the region of Susa.—C. BOGGIO, *The first Christian churches of the Canavese*. 1. There are records of a number of early monuments in this province, but it was at all times such a battle-field for different nations and factions that the greater part of the earliest monuments have been either entirely destroyed, as the catacombs of S. Bessus and S. Juvenalis, or nearly so, as that under the church of *Santa Maria in Doblato* near Pont. The cathedral of Ivrea retains only its two Lombard towers. At Settimio Vittone is *S. Lorenzo in Castello*, a small simple octagonal church, coupled with one in the shape of a cross and similar to the Mausoleum of Gallo Placidia at Ravenna. At San Ponso is an octagonal chapel whose cupola is supported by a wall having four square and four semicircular

niches, similar to the baptistery attached to the Cathedral of Chieri. As no traces of large churches exist, it remains uncertain whether these interesting little edifices [which appear to belong to the VI-VII cent.] were baptisteries or places of worship.

**BULLETTINO DI ARCHEOLOGIA CRISTIANA. 1886. Nos. 1-4.**—  
O. MARUCCHI, *Meetings of the Society of Christian Archæology*. The meetings reported are those of the winter and spring of the season 1885-86. The eleventh year was inaugurated by a meeting on *Dec. 13, 1885* (in the new abode of the Society, the *Palazzo dell'Accademia ecclesiastica*) by an address of Comm. DE ROSSI on the discovery of the Cemetery of S. Felicita (*cf. JOURNAL*, vol. II, pp. 93, 354), which he continued at the next sitting, *Jan. 3*. Prof. STORNAJOLO spoke of some paintings, recently discovered in a crypt of the basilica of S. Vincenzo al Volturno, representing scenes from the life of the Virgin and episodes of the martyrdom of SS. Stefano and Lorenzo. These paintings (published in part by P. Piscicelli in a letter to P. Tosti, 1885) belong to the ninth century. Their exact date is determined by the portrait of their author, abbot Epiphanes, who is there represented with a square nimbus. The style is native South Italian, as distinguished from the Byzantine. *Feb. 7*, Prof. O. MARUCCHI spoke of the discovery at S. Agnese of the front of a sarcophagus of especial interest, as it has, in the centre, a figure of Christ bearded and of the severe type, holding the book in his left hand and blessing with his right, while at his feet lies the case for containing the volumes of the divine word. By a comparison of this monument with others in which the Saviour, though bearded, has a sweet and gentle expression, Prof. Marucchi concludes that the new relief proves the type of the severe bearded Christ to have existed as early as the fourth century, though it was only fully developed later in the mosaics. Sig. IGNAZIO GIORGI sent a paper regarding two metrical pieces discovered by him in a seventh-century ms. of the Victor Emmanuel Library. The first is the acrostic metrical eulogy of an unknown martyr, the deacon Nabor killed by the Donatists: it is attributed to S. Augustine. Comm. DE ROSSI, in continuing his account of the discoveries made in the cemetery of S. Felicita, called attention to the curious fact that in a *loculus* of IV cent. A. D. was infixed a *quadrans* with a dog on the reverse, which Visconti has shown to have belonged to the Roman colony of Sutri between the fourth and fifth century of Rome: it was thus employed seven centuries after it was current coin. *March 7*, Prof. O. MARUCCHI reported on the excavations in the cemetery of S. Sebastiano (*cf. JOURNAL*, vol. II, pp. 338-41). Comm. DE ROSSI gave a description of a remarkable Christian isolated subterranean cubiculum, anterior to Aurelian, seen by Campana, who sketched the paintings that adorned it. The vault had: in the centre, the Good

Shepherd; in the angles, four busts, between which were four scenes,—Moses striking the rock; Christ multiplying the loaves; raising Lazarus; etc. In the arcosolia were: the *orante*; Daniel; Noah. By the door: the paralytic; and Job. Of two Greek inscriptions found, one is that of Verazio Nikatora, probably a Galatian; and there are reasons for believing that a number of Asiatic Greeks were buried in this region, which explains why this cubiculum is not connected with any catacomb. This cubiculum cannot now be found. M. DE LAURIÈRE spoke of an inscription at S. Bernard de Comminges, with the consular date of 347, which is one of the oldest in France. Comm. DE ROSSI announced the discovery, at Philippeville in Africa (the ancient Rusicade), of the ruins of a large Christian basilica with columns, capitals, and other decoration.—G. B. DE ROSSI, *The mausoleum of the Christian Uranii at S. Sebastiano on the Via Appia*. An inscription of the year 349, during the consulate of Limenius and Catullinus, was found near S. Sebastiano, and reads as follows: MIRE BONITATIS AC TO... | ADQVE PRVDENTIAE  FL·MA... | DVLCISSIME·QVAE VIXIT AN... | DXXV DEP·INP XI KAL DEC·LIME.... The mausoleum in which it was found is one of the finest of that region. A large inscription on a marble architrave shows it to be the family mausoleum of the Uranii; the brother of the great Ambrose of Milan was Uranius Satyrus and the letters MA might even suggest the name of their sister Marcellina.—G. B. DE ROSSI, *Primitive Priscillian epigraphy, or the inscriptions cut in marble and painted on tiles of the earliest region of the cemetery of Priscilla*. In this lengthy and important monograph, De Rossi takes up a subject the materials for which he has been collecting for years. It is a collection and an analysis of the elements necessary to define with the greatest precision possible the period to which should be assigned the ancient tombs bearing inscriptions, some cut in marble and others painted on tiles, situated in the primitive and central region of the cemetery of Priscilla. Only the first part appears in the present number of the *Bullettino*, and that is a long and minute analysis of the inscriptions: the chronological and historical dissertation is to appear in the following year. The inscriptions are taken up in chronological order, and light is thrown on them by notes and comparisons. Sometimes there are discussions of a certain length, such as that raised by the inscription 

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. It was of the utmost importance to decide whether the initial letter M stood for *Martyr* or not, especially in view of the great antiquity of this group of inscriptions. De Rossi takes up and rejects as impossible all other interpretations, and decides in favor of *Martyr*, applying the same interpretation also to the two inscriptions M·ZOVCTINOC and MM SILVIN FRT. Without dwelling longer on the inscriptions, the interest of which will appear more fully in the second

part of the treatise, let us pass to the chapter on "*The inscriptions, sarcophagi, paintings and monuments of the artery K and its dependencies.*" This artery is the principal one and that nearest the staircase which originally led down to the cemetery: it was a sand-pit gallery turned to cemetery use. It was broad and was flanked, in *K 6*, on either side by large niches to receive marble sarcophagi, and was without any *loculi*: in *K 1*, *2*, *3*, the *loculi* prevail, but they are of great antiquity; one of them is adorned with a beautiful decoration of stucco-reliefs, and by its side is the famous group of the Virgin and Child with the figure pointing to a star. The fragments of sarcophagi found are insignificant, and they seem to have been barbarously broken into a thousand pieces: none of them are of Christian workmanship. The most important group of crypts in the whole cemetery is that marked *A*, *A<sup>I</sup>-A<sup>VI</sup>*, *B*, as is proved by the beautiful decoration in stuccos, frescos and marbles. The largest, *A<sup>I</sup>*, is entirely built up, has an apse, and was covered with large marble slabs: *A<sup>V</sup>* was decorated with beautiful friezes of stucco with elegant volutes of leaf-work and female figures of classic art, apparently belonging to the period of Hadrian or the first Antonines. The great crypt *A<sup>VI</sup>*, commonly called *cappella greca*, is adorned with the very early and now famous frescos and with architectural friezes in stucco. This region is not yet entirely explored. In the fourth century, works were undertaken in order to unify this group of crypts. In view of tiles of the years 159 and 164, found under the pavement of crypt *A*, De Rossi concludes that the period of the expansion of the cemetery beyond the sand-pits, and of the multiplication of the tombs under the pavement, was that of Marcus Aurelius, Commodus and the close of the second century, and that the prevalent period of the tombs of the primitive nucleus in the sand-pits is earlier, and may begin with the Flavii and the Claudii.

**BULLETTINO DELL' IMP. ISTITUTO ARCHEOLOGICO GERMANICO. SEZIONE ROMANA. Vol. 1. No. 3.**—W. HELBIG, *Excavations at Vetulonia* (pp. 129–40). The wonderful discoveries made by Signor Falchi in the necropolis of Vetulonia have been more than once noticed in the *JOURNAL* (vol. I, p. 447; vol. II, pp. 92, 492–94). This paper by Professor Helbig was written after the first discoveries on the *Poggio alla Guardia*. The first objects described, belonging apparently to a well-tomb, form a group to which belong, (1) two Egyptian scarabs of green enamel, judged by Mr. Steindorff to be not anterior to the xxvi dynasty; (2) an oblong silver strip, stamped with a design of ducks and disks; (3) a superb silver clasp, forming part of a long necklace of silver and amber tubes; (4) fragments of a fine silver chain, belonging to another necklace; (5) two simple gold rings, four silver fibulae, and an amber ring. Toward the south is a series of hole-tombs cut in the soft rock and irregular in shape:

they seldom appear in the *Poggio alla Guardia*, but in the neighboring *Poggio al Bello* they alone are employed. As at Tarquinii the well-tombs are followed by trench-tombs, so at Vetulonia they are followed by hole-tombs, and in each case their contemporary use and gradual transition from one to the other are clearly apparent. But, while at Tarquinii the modification in the construction of the tombs was accompanied by a change in the sepulchral rite from cremation to burial, at Vetulonia the rite of cremation was always continued. Professor Helbig describes the contents of three hole-tombs, opened before his visit, which had fortunately not been entirely devastated by previous visitors. The first and most important is that called the *Tomb of the Warrior* on pp. 493-4 of vol. II of the JOURNAL, where its contents are briefly described: the long Etruscan inscription on a black bucchero vase, and a silver-gilt cup of Phoinikian workmanship engraved with griffins, sphinxes, birds, winged horses, etc., prove the tomb to belong to the VI cent. B. C. The floor of the hole was covered with vases, arms, and other objects deposited in honor of the defunct. A vase of beaten bronze, containing the ashes, had the first place in the row of vases: the other vases were placed either on the bottom or inside bronze jars: of the latter a number were found, full of earth, which contained the greater portion of the precious and smaller objects. The terracotta vases belong to three classes: (1) brownish vases made by hand, of local manufacture; (2) vases of black bucchero, probably imported from Southern Etruria; (3) some painted Greek vases. In another similar tomb was found a figurine in green enamel, of Egyptian style, representing Isis and Osiris; a number of objects in amber; chains and rings of gold, silver, and bronze. In a third tomb was an idol of Bes.—A. MAU, *Excavations at Pompeii* (pp. 141-57; pl. VIIA). This paper describes the excavations carried on at Pompeii, during the season 1884-85, in the *Reg. 8 ins. 7* and *ins. 2*. The former were mainly confined to the great garden which occupies the E. end of the *insula*, and to an adjacent small house. At the S. W. corner there are remains of a house that existed before the garden, with frescoed decoration in the second style: to this partly-demolished house belongs a *lararium*. The small house occupies the smaller and the W. side: in its present shape, it is not anterior to the earthquake of 63 A. D., though its construction dates further back and it preserves paintings of the third style.—*Reg. 8, ins. 2*. Two houses (Nos. 32-35 and 36, 37) standing close to that called "of Joseph II" are described: they are similar to the latter. Here, also, the fronts show traces of the first period before the destruction of the city-wall, while the rear parts, which were adjacent to it, are rebuilt. The atrium (with its chambers) of No. 32-35 preserves the form of the *epoca Sannitica*. Although this house was one of considerable size and importance, its decoration is very inferior, and it contains no figured frescos.—A. KLITSCHKE DE

LA GRANGE, *Archæological finds in the territories of Tolfa and Allumiere* (pp. 158-60). The existence of Italic tombs of the first iron age was, until now, ascertained only for the northernmost part of the *Monti Ceriti*, i. e., the Allumiere territory alone, and near the *Colle della Pozza*, the slopes of *Monte Rovello*, and the east side of *Poggio Umbricolo*. The discovery, however, of a tomb belonging to the same period at the *Coste del Marano*, on the southernmost edge of the territory of Tolfa, shows that this entire range of mountains must have been at that time filled with numerous centres of population.—G. WISSOWA, *Silvanus and his companions: a relief in Firenze* (pp. 161-66; pl. VIII). This relief has been for some years in the new museum of the *Palazzo della Crocetta* at Firenze. It was evidently not an independent basrelief, but formed part of some architectural decoration. In a background made to imitate a solid wall, three doors open—the central one with a gable, the others with a low round arch: framed by each, is a figure. In the centre is Sylvanus with a Satyr on the left and a Pan on the right. This relief is the only example of a union of Sylvanus with figures of the escort of Dionysos—a union so general in the literature.—F. VON DUHN, *Two basreliefs of the Rondinini palace* (pp. 167-72; pls. IX, X). These reliefs both belong, as shown by their style, to the time of Antoninus Pius. The first shows the sacred serpent of Asklepios (brought to the island of the Tiber by Antoninus Pius) coming forth to drink, while the figure of the river-god rises from the waves to offer it water in a cup. In this connection, the writer identifies the site of the temple of Asklepios with the present church of S. Bartolommeo.—H. VON ROHDEN, *Terracottas from Nemi* (pp. 173-78). This paper is a continuation of one published in the *Bullettino* of 1885 (pp. 149-57): it is called forth both by the importance of pieces afterward discovered, and to draw the general conclusions made obvious. In general, the terracottas belong to the last centuries before Christ, there being nothing archaic and but a few insignificant fragments of the Imperial period. Of especial importance are (1) a group of reliefs with a vegetable ornamentation (= Capua) or a winged goddess, sometimes with animals; (2) antefixæ with heads—sometimes Bacchic female-heads, sometimes masks; (3) fragments of the roof of a miniature temple; (4) large figures, especially of Diana, generally worked in the round, sometimes in relief.—P. STETTINER, *Some new Aes grave* (pp. 179-82). The most important is a Roman *Aes librale* (fig. 1) with the usual type of the bifrons on the obverse, and the prow and sign of the *Aes* on the reverse: what render it interesting are the letters on the obverse, placed under the head, which are very indistinct; they have been read IANI, but the real reading is IANVS. This is important as identifying, beyond doubt, the double-head figured on the *Aes*. A second coin (fig. 2) has, on both sides, the Gorgon-head, of the type on the coins of

Populonia. The third example is a fragment of *Aes signatum* (fig. 3) bearing on each side the impress of a fish-fin (cf. Garrucci, t. xxv, No. 2, who, however, mistakes them for branches of verbena and chamaerops): it belongs to Todi.—G. F. GAMURRINI, *Combat of the Lemnian women on a Bolognese stele* (pp. 183–87). On an Etruscan stele with the inscription, *I am the tomb of Vettius Catilius*, belonging to the third century, there are four reliefs, one under the other. The second shows the usual chariot-procession; the third represents a combat between a female on horseback and a warrior, and is identified by the inscription *Lemnites*. The subject, for the first time met with, is the contest, celebrated by Greek historians and dramatic and comic poets, of the Lemnian women and the Thracians. According to the tradition, the Lemnian women, rejected by their husbands who took other wives from Thrace, killed, after a sanguinary contest, their former husbands with the women and children, and the island was henceforth under female rule. The fact that this subject was represented by an Etruscan artist gains special significance through the discovery of the famous long Lemnian inscription (*Bull. Corr. Hellén.*, 1886, p. 1) in archaic Greek letters, but in a language akin to Etruscan. This has led several *savants* to suggest that the Etruscans were merely a branch of the Pelasgians.

No. 4.—L. BORSARI, *Excavations at Ostia* (pp. 193–99). A description of the excavations undertaken in 1885–86, under the direction of Prof. Lanciani, to unite the Theatre with the Temple of Vulcan. [They have been carefully described in the JOURNAL, vol. II, pp. 483–84.] Only one of the four temples found has been identified by an inscription: VENERI SACRVM. The excavations carried on between this temple and the group of *horrea* yielded no results, as the quarter was one inhabited by the poorer classes, probably by dyers and tanners. The work undertaken to the south of the Theatre was of great importance for the epigraphy of Ostia, as, in restoring the central ambulatory, four marble pedestals came to light with dedicatory inscriptions that form a part of the interesting group discovered in 1880 (*Not. d. Scavi*, 1880, pp. 470 *sqq.*).—F. KOEPP, *Archaic Sculptures in Roma*, II (pp. 200–202; pl. XI). A female head in the Chiaramonti Museum is published. It is of Greek marble and once belonged to a statue, though it was probably worked by itself to be set on to the body. Whether it be the Greek original or a copy, it bears unmistakably the mark of the pre-Pheidian art of the middle of the fifth century [to judge from the plate this would seem doubtful, to say the least.—ED.] and related to the Olympian sculptures. In this class the writer also places the heads: II, in Lansdowne House; III, Richmond; IV, British Museum; V, Alba coll. in Madrid; VI, Villa Albani No. 63; VII, Torlonia Mus. No. 486.—A. MAU, *Excavations at Pompeii* (pp. 203–13; pl. XII: continued from p. 157).

Description of a house whose different stories are exhibited on pl. XII: it was formed by the reunion of two earlier houses which met at an angle and which were still divided in the Imperial period, at the time of the third style. Both atria had been demolished, probably in consequence of damages produced by the earthquake of 63. On the walls of one of the atria are terracotta "grondaie" of four classes with lion-heads between palmettes, painted.—W. HELBIG, *Journey through Etruria and Umbria* (pp. 214–34). This paper is the fruit of a trip to Orvieto, Chiusi, Perugia, and Todi. For Orvieto, the latest results of excavations at the *Cannicella* are given: the tombs all belong to the latter half of the VI century B. C. At Chiusi, he examined the contents of the tombs of *Seianti Thanunia*, several times mentioned in the JOURNAL (vol. II, p. 482; vol. III, p. 180) and now at the British Museum. At Perugia, the most important late discovery had been of some tombs on the *Frontone*, and a description is given of their contents, especially that of the warrior-tomb with the *kottabos*, which belong to the V cent. B. C. They have been noticed in the JOURNAL, vol. II, p. 484. Especially to be noted is a red-figured krater painted in the Attic style of the Periklean age (second half V cent.). On one side are Zeus and Hera, each enthroned and holding a sceptre and patera, and each with an attendant. The second composition represents the departure of Triptolemos, and includes figures of Persephone, Demeter and Hermes. At Todi, Prof. Helbig found the rich contents of the recently-discovered tomb of a woman belonging to the third century B. C., to whose extreme artistic and archæological value attention has been called in the JOURNAL, vol. II, pp. 490–91.—Appendix: remarks on the *kottabos* (pp. 235–42). This game, so familiar to the Greeks from early times, was also common among the Etruscans. It consisted of a slender bronze stick rising from a circular base, on the top of which stood a small figure or *Manes*; a ring is inserted over the pointed top and stops two-thirds down, where the stick grows larger, sustaining a thin bronze basin (*λεκάνη*, *λέβης*, etc.): the last constituent is a concave bronze disk (*πλάστιγγή*) which can be balanced on the obtuse end of the metal stick. There were three ways of playing the game: throwing the wine (1) at the balanced *πλάστιγγή* so as to make it fall into the basin; (2) at the head of the *Manes*; (3) at the *πλάστιγγή* placed on top of the *Manes*.—I. FALCHI, *Excavations at Vetulonia* (pp. 243–44). A description of the vessel and the ossuary found in the Tomb of the Warrior, and fully described on p. 493 of vol. II of the JOURNAL.—G. SORDINI, *A polygonal wall found in Spoleto* (pp. 245–46). Cf. JOURNAL, vol. II, p. 490.—F. MARX, *Relief in the Villa Albani* (pp. 247–52). In this relief the semi-nude figure of a powerful brutal man is negligently seated on a rock, with one arm bending towards him without effort a pine tree, while he reclines on the other and seems in the act of conversing with some figure

that does not appear. This is evidently the giant Sinis Pityokampes defying the hero Theseus, represented on a corresponding block that has been lost. It belongs, doubtless, to a series of decorative reliefs representing the exploits of Theseus, and its model was probably an Attic work of the fifth century.—TH. MOMMSEN, *Epigraphic miscellanea* (pp. 253–54). An inscription of A. Didius Gallus, legate to Gaul. A. L. FROTHINGHAM, JR.

ΕΦΗΜΕΡΙΣ ΑΡΧΑΙΟΛΟΓΙΚΗ. JOURNAL OF THE ARCHÆOLOGICAL SOCIETY IN ATHENS. 1886. No. 4.—D. PHILIOS, *Inscriptions from Eleusis* (contin.). 29. This inscription is graven upon both sides of a flat slab of Pentelic marble. Upon one side are 105 lines of 47 letters, on the other, 90 lines of 51 letters, each. We have here a detailed report concerning the materials for some building. The contractors were to furnish all materials, but the city agreed to furnish lead and iron for the fastening of the stones, and a good pulley. The inscription belongs to a time shortly after the archonship of Eukleides (403 B. C.). Possibly, the building for which the materials were to serve may have been a stoa intended to stand before the temple by Iktinos, though no such stoa was built until much later, at the time of Demetrios of Phaleron.—S. A. KOUMANOUDIS, *Two Attic Decrees; and, in an Appendix, a Decree from Priene*. No. 1 is a decree in honor of a Boiotian proxenos of Athens. The date is either the archonship of Euandros (382–1 B. C.) or, less probably, that of Euthykses (398–7 B. C.). The inscription is fragmentary, and was found in a street in Athens. No. 2 is also fragmentary: it is said to have been found in the eastern part of Athens. This is also an honorary decree, apparently in honor of some citizens of Priene. It appears to belong to about the middle of the fourth century B. C. The *Appendix* gives two fragments of a decree of Priene in honor of some citizen who had rendered various services to the city. The approximate date is fixed by the mention of Julius Cæsar.—A. STSCHOUKAREFF, *Megarian Inscriptions*. No. 1 is part of an honorary decree. Mention is made of the Roman senate, and the name M. Calidius occurs. The inscription appears to belong to the first half of the first century B. C. The greater part of No. 2 was published by J. Schmidt (*Mith. Ath.*, VI, p. 352). It is a decree in honor of several persons. The titles of several Megarian officials occur in this and the preceding inscription. The date assigned is "Roman times before Christ." No. 3 was apparently upon the base of a statue of the Emperor Claudius. It mentions him as pontifex maximus, imperator for the twelfth time, consul for the fourth time, holder of the dictatorial power for 47 years, and father of his country. No. 4 is published by Le Bas, No. 48. One fragment was found at Aigina, the other at Megara. No. 5 is *C. I. G.*, 1063. Nos. 6 and 7 are simple sepulchral inscriptions.—I. SAKKELION, *Christian Sepulchral Inscriptions*. Nos. 1, 2,

and 3 are rude inscriptions giving the names of the deceased with the dates of their death. The dates are 856, 921, and 867 A. D. These three inscriptions are upon the same stone, found in excavating the site of the burnt market in Athens. Nos. 4 and 5 are from a manuscript of the XVI century in the national library at Athens. No. 4 is entitled: *On the grave of Demetrios Leontares in the monastery of Petra*. It consists of 20 lines. This Leontares lived under Manuel Palaiologos II, and died in 1431 A. D. No. 5 is a similar poem on the tomb of Isaac Asanes (τοῦ Ἀσάνη κυροῦ Ἰσαακίου) and his grand-daughter in the monastery of the Philanthropos. This Asanes is the one who was sent with Leontares and Manuel Kantakouzenos to meet the Amir Mehenet I in 1420. It is not known in what part of Constantinople the monasteries of Petra and Philanthropos were situated. In a manuscript of the Bibliothèque Nationale in Paris (No. 475: cf. Δελτίον τῆς Ἱστορικῆς καὶ Ἐθνολογικῆς Ἑταιρίας τῆς Ἑλλάδος, I, p. 455) twenty-three lines are identical with lines of these epitaphs.—B. STAES, *Sculptures from Epidaurus* (pls. 11, 12, 13). Under the remains of a Roman building to the north of the temple of Asklepios were found statues and statuettes of Asklepios, Hygieia, Athena, and Aphrodite. Seven Asklepios-figures were found, one of which is published. The height of the figure with its base is 0.80 m. The god stands, leaning with his left arm-pit upon his staff, while his right hand rests upon his hip. His right shoulder and breast are uncovered. The left arm is wanting from above the elbow. The inscription states that the statue was dedicated by the high-priest Plutarchos in the year 185 after Hadrian's visit to Greece. An inscription by the same man, with the same date, is found upon the base of another small Asklepios, and is here published. Two figures of Hygieia (height 0.57 m. and 0.52 m.) are published. One was dedicated by Gaius to Hygieia, the other by Lysimachos to Hygieia and Telesphoros, as the inscriptions show. A third inscription with a dedication to Asklepios, Hygieia and Telesphoros is also published. The two figures of Hygieia are much alike, each being clad in a long garment, and each being engaged apparently in feeding a serpent. In one case, however, the serpent is twined about the body of the goddess, while in the other it merely passes over her shoulders. The left hand of the goddess is wanting in both cases, so that her action is not quite plain. Three figures of Athena are published (described and discussed by E. Petersen, *Mith. Ath.*, XI, p. 309 ff.). Two of these figures represent Athena with long drapery, shield, helmet, and aegis, apparently encouraging her followers in battle. One of these figures is dedicated to Artemis, but the inscription expressly calls the figure Athena. The other figure is dedicated to Athena Hygieia, and Petersen thinks it might be an imitation of the new-born Athena of the eastern pediment of the Parthenon. This new-born Athena might, then, stand in special relation to

childbirth, and hence be classed with the deities of medicine. An inscription here published shows that Athena was worshipped at Epidauros as Ἀρχαγγής, and it is suggested that these figures properly represent Athena in this character, but that one of them, being bought ready-made, was dedicated to Athena Hygieia. The third figure represents Athena in quiet pose, more like our usual conception of Hygieia. By a new reading of the inscription, it appears that this figure was dedicated by Genethlios, possibly the sophist from Petra in Palestine mentioned by Suidas and others. On Pl. 13 a figure of Aphrodite is published. The base and feet, as well as the right arm from above the elbow, are wanting: head and left forearm were found not far from the trunk. This figure (1.51 m. in height) resembles the so-called Venus Genetrix of the Louvre, but here the right, not the left, shoulder and side are uncovered. A sword-strap shows that the goddess wore a sword, and perhaps she carried a spear in her left hand. Thus, though the type is the same as that of the so-called Venus Genetrix, the details are very different.—D. PHILIOS, *Head from Eleusis* (pl. 10). Is published a head of a youth whose hair falls in wavy locks about his face and neck, and is held by a band about his head. The nose is gone, and the lips much injured. The work is ascribed to the fourth century B. C., and seems to be the original, or more probably a copy, of a work which exists in replicas in the Louvre (see *Gazette Arch.*, 1886, pl. 22), in the Capitol, and at Mykonos (see *Bull. de Corr. Hell.*, 1885, p. 253). This head was found near the Propylon of Appius. Many other objects were found at the same place. Of these the following are described: 1. A figure of a youth, of Pentelic marble: height about 1.20 m. The head is very effeminate; parts of the legs and arms and the back of the head are wanting; and the surface of the figure, especially the drapery, is injured in many places: the work is not very good. Perhaps Bacchos is represented. 2. A high-relief representing a man seated upon a throne the arms of which are adorned with sphinxes: the figure is about life-size: the parts above the breast, and also the feet, are gone. Though the work is careless, especially in the treatment of the himation which covers the legs, the relief may belong to the fourth century B. C. 3. Two fragments of a low-relief. A draped female figure is represented, but only the throat, breast, and part of the arms are preserved: the work is good. 4. Two fragments of high-relief like those found in the Asklepieion at Athens. Five figures are visible—all female: one large figure is followed by four smaller ones. The relief was apparently once of considerable size. The state of preservation is bad, but the work appears to be good. 5. A low-relief representing two large (nearly life-size) female figures and one smaller one. One of the figures carries what seems to be a torch. Perhaps Demeter and Kore are here represented. The work seems to be of Roman times. 6. The upper

part of a terma with a life-size archaistic head of Dionysos. 7. A dedicatory inscription on a pedestal.—P. GEORGIU, *Inscription from the Akropolis*. This inscription was found near the Erechtheion. It consists of three columns, but the two at the sides are almost entirely lost. This inscription was part of a list of Choragic victories (cf. Köhler, *Mith. Ath.*, III, p. 10 ff.). The middle column records victories in the archonship of Philokles (ol. 80.2), among them, one of a comic poet Euphronios, and one of Aischylos (with the *Oresteia*), and gives the beginning of the list of victories under the next archon, Habron. Diod. Sic. (XI. 79) calls the archon of ol. 80.3 Bion. This should be corrected to Habron.—ADDENDA and CORRIGENDA.

HAROLD N. FOWLER.

GAZETTE ARCHÉOLOGIQUE. 1887. Nos. 1-2.—E. SAGLIO, *Polyphemos* (pp. 1-7; pl. 1). Description of a black-figured *oinochoë* in the Louvre (Campana collection) whose only figured representation gives the scene of the blinding of the Kyklops Polyphemos by Odysseus and his companions. Polyphemos is reclining in an easy posture, asleep, a massive club resting within his left arm: his figure is colossal and well-drawn. Two figures (one being Odysseus) are rapidly approaching him, holding the red-hot pole which they are on the point of thrusting into his eye. Nearby, a third figure is represented heating the end of the pole in a blazing fire [Is not this Odysseus himself, repeated?]. Four other representations of this scene on vases, treated in different ways, were already known, but none so artistic.—A. CHOISY, *The excavations at Susa, and ancient Persian art* (pp. 8-18; pl. 2). Recapitulation of the details and results of M. Dieulafoy's expeditions to Persia and excavations at Susa, and description of the monuments found. In this first article, M. Choisy describes the ruins of the palace, the columns, the two friezes of enamelled reliefs, and the engraved stones.—A. DE CHAMPEAUX and P. GAUCHERY, *Works of architecture and sculpture executed for Jean de France, duc de Berry* (pp. 19-28; pl. 3). In the transformation of French art from the pure, severe and broad style of the XIII century to the more fastuous, realistic and personal art of the Valois, the Duc de Berry took a leading share, and, had his career been more fortunate, the school founded by him might have exercised a permanent influence. The duke was a great builder, and seventeen châteaux or hôtels are attributed to him, besides the construction of many religious edifices. Among the artists whom he employed were the sculptors Jean de Liège and André Beauneveu of Valenciennes, the painter Jean de Bruges, and the architect Guy de Dammartin. The artistic works undertaken for him at his favorite château of Mehun-sur-Yèvre, excited so much interest that, on two occasions, the Duke of Burgundy, Philippe le Hardi, sent artists to examine them (among these was the famous sculptor Klaus Schluter). A descrip-

tion of this château, as well as that of Concessault, is given in this paper. Shortly after, the Duke charged Guy de Dammartin to build a palace at Riom: the names of the artists who executed the sculptures are known. The building has been lately made over, and only the chapel with its painted glass in great part preserved.—E. LEFÈVRE-PONTALIS, *Study on the capitals of the church of Chivy* (pp. 29–36; pl. 4). In consequence of the repeated attempts of M. Ed. Fleury to attribute these and other series of decorative sculptures to the Merovingian period, M. Pontalis proves them to belong to the XI century. M. Fleury had supported his argument by the assertion that the nave of Chivy belonged to the XII cent., to which period the primitive capitals could not be attributed, and he then asserted these capitals to be the remains of an earlier building. This is disproved by the evident identity of style shown by M. Pontalis to exist between the nave of this church and those of others in this region. Besides, several of these buildings of the XI century in the Soissonnais and Beauvaisis contain capitals of a similar character (*e. g.*, Morienvail, Oulchy, St. Thibault, *etc.*).—C. DE LINAS, *The reliquary of Pépin d'Aquitaine in the treasury of Conques* (pp. 37–49; pl. 6). When M. Daxel wrote his important monograph on the treasury of Conques (published in 1861), he was not allowed to examine one very interesting monument called the Reliquary of the Circumcision, which is now carefully studied and reproduced by M. de Linas. In the absence of any direct evidence, the writer has recourse to the traditions of the Abbey and the documents relating to its Carolingian founders and patrons, in order to show that this reliquary was given by Pépin king of Aquitaine at the beginning of the IX cent.—L. PALUSTRE, *The architects of the Château of Fontainebleau* (pp. 50–54; pl. 5). An answer to an article lately published in this review by M. Molinier, who contradicted certain conclusions regarding the relative share of the several architects in the construction of Fontainebleau. M. Palustre declares that the Château of Saint-Germain-en-Laye was not finished in 1544, as asserted by M. Molinier, but in 1548, as shown by the *Comptes*. Other objections are refuted, as for instance that, not Chambiges, but *Il Rosso* constructed the *Grotte des Pins*, whereas he only appears in 1535, and the grotto was finished in 1531.

Nos. 3-4.—L. HEUZEY, *On some cylinders and seals from Asia Minor* (pp. 56–63). This is a study of a number of engraved stones coming from the region of Aïdin in Asia Minor, which have strong analogies with the "Hittite" rock-sculptures. The greater part were given to the Louvre by M. Sorlin-Dorigny. The most important is a hematite cylinder of fine workmanship (Perrot et Chipiez, vol. iv, p. 771), in which the principal subject is the presentation, to a bicephalic divinity, of three worshippers bearing the lance and the curved stick or *lituus*. [In commenting on the figure of a female divinity whose feet rest on the back of an animal, M.

Heuzey commits the singular error of doubting that divinities on animals are often seen on ancient purely Babylonian works.]—A. DE CHAMPEAUX and P. GAUCHERY, *Works of architecture and sculpture executed for Jean de France, duc de Berry* (II, pp. 64-71; pl. 7). The present article treats entirely of one of the most important artistic undertakings of the Duc de Berry, the Palace of Poitiers. There only remain the original accounts of the years 1384-86, but they regard especially the Tour de Maubergeon, one of the most original and historically interesting monuments of old Poitiers. The works were directed by Guy de Dammartin, who had under him Jehan Guérart and Robert Fouchier. The records cite the names of all the stone-cutters, sculptors, masons and other artisans, engaged in the work. The manufactory of enamelled faïence used for the pavements of the halls was under the direction of Jehan de Valence. Part of the decorative sculpture was executed by Henry Mornant and Regnaudin de Bossuc, and the painted glass by Henry Lancien. The main hall of the Palace has preserved the imposing character of its XIV-cent. architecture, when it was restored by Guy de Dammartin.—A. ODOBESCO, *A silver dish and a stone sarcophagus with hunting-scenes, found in Râmania* (pp. 72-80; pls. 8, 9). The dish contains a double decoration in relief: in the centre is a combination of flowery volutes in two concentric circles intersected by two squares formed by stems, the whole being surrounded by a tasteful border. The outer rim is divided, by circular medallions containing heads, into six compartments in which are represented real or fanciful hunting-scenes: every alternate figure is in high-relief. Most of the scenes represent the combat of two men or centaurs with two wild beasts. The dish forms part of a most interesting series of antiquities found in a tomb at Contzesti between 1806 and 1812. It is conjectured to have been the tomb of some great Mongol chief among those led by Batu-Khan in 1240, in which some of the ancient vessels of precious metals which he had captured were buried. His horse, with rich gold harness, was buried with him, and the tomb filled with precious stones, objects in gold and silver, and splendid arms.—S. REINACH, *Bust of an athlete in the Louvre* (pp. 81-85; pl. 10). This bust from the Villa Borghese has been in the Louvre for eighty years without being adequately noticed. It is of Pentelic marble: the upper part of the head, the end of the nose and the chest are modern restorations. The nose is strong, the eyes small and narrow, the hair encircled with a fillet. The head evidently represents an athlete. In this connection, M. Reinach classifies the heads of the period about contemporary with Pheidias, in the various museums, which bear some analogy to the one here studied. For various reasons, among which are similarities to the Capitoline *Youth extracting a thorn*, the Apollon *Choiseul-Gouffier* and its Athenian replica, M. Reinach attributes this head to Pythagoras of Rhegion or his school.—S. REINACH,

*Head of Bacchos Ammon in the Museum of Constantinople* (pp. 86-87; pl. 10).—M. COLLIGNON, *Fragments of a marble statue of ancient Attic style in the Louvre* (pp. 88-93; pl. 11). These archaic fragments are in Pentelic marble, instead of the usual Parian. The dimensions of the statue are less than life-size: the details of the flesh are very highly finished, while the head-dress is left quite rude: there is no doubt that the head is of a male figure. A fragment of the left leg, with well-studied muscular development, shows the man to have been young and agile: the left hand is nervous and delicate, with closed fingers. M. Collignon suggests the hypothesis of a portrait-statue, placed over a tomb. It is slightly posterior to the "Apollon" of Tenea (middle VI cent.), and belongs without doubt to the early Attic school.—E. MOLINIER, *Two Reliquaries from the chapel of the Order of the Holy Ghost* (Louvre) (pp. 94-98; pl. 12). These reliquaries belong to the XIV century, and are in the form of angels bearing in both arms a barrel-shaped reliquary of crystal. The angels are of silver-gilt and have large outspread wings. They were first added to the treasury of the kings of France by Anne de Bretagne (inventory of 1498).

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**JAHRBUCH DES K. DEUTSCHEN ARCHÄOLOGISCHEN INSTITUTS.**

**Vol. II. 1887. No. 1.**—A. MICHAELIS, *In Remembrance of Wilhelm Henzen*. An account of the life and works of the late Wilhelm Henzen, director of the German Archaeological Institute in Rome from 1856 until his death, Jan. 27, 1887.—L. v. SYBEL, *Two Bronzes* (pl. 1). A cut in the text shows a small bronze figure in the British Museum, formerly in the Payne-Knight collection. A nude seated male figure is represented pointing with the forefinger of the right hand over the left foot, which is held up to the right knee, immediately below which the right leg is broken off and lost. The execution is very good. Various interpretations have been suggested, but it is doubtful if the figure has any mythological signification. Pl. I represents a bronze cheek-piece from a helmet. A bearded man, clothed only in a chlamys and pilos, is sitting on a rock, looking into the distance. Beside him are a sword and two spears. It may represent Odysseus or Philoktetes, or may have no mythological meaning. This bronze is in Berlin.—F. DÜMLER, *Vases from Tanagra, and related objects* (pl. 2). Two vases from Tanagra are published. One is adorned with linear ornament and seven animals, the other with linear ornament and a checker-board pattern. The style is that variously called Chalkidic or Proto-Korinthian. No. 3 is a fragment of a vase from Aigina. Beneath some lines appears a head without a beard and shaven, except that the hair at the back is long and tied together. This is the coiffure of the Abantes of Euboea (Hom. *Il.* β. 542). This fragment belongs to the same class as those from Tanagra, and

proves the Euboic (i. e., Chalkidic) origin of the class. No. 4 is a fragment from the Heraion near Mykenai. Under some lines is the upper part of a rudely drawn female figure, somewhat like those on Dipylon-vases. Beside this figure is an unrecognizable object.—A. MILCHHÖFER, *Reliefs from Pillars for the support of Votive Tablets*. A cut in the texts represents five fragments of reliefs from Athens, apparently from two monuments. The upper parts of Zeus and Athena are visible upon the end of one block, upon the sides of which are parts of so-called "hero-reliefs." Upon the end of the other block is the figure of Artemis, opposite to whom some other deity once stood. A fragment of a "hero-relief" is preserved upon the side of this block. These reliefs are evidently not sepulchral monuments, but votive reliefs, probably offerings to heroized dead. The frequent connection of such reliefs with Asklepios is explained by the power of healing attributed to heroes.—J. BÖHLAN, *Early Attic Vases* (pls. 3, 4, 5). The vases published on these plates and in twenty-three cuts in the text are of Attic origin, and most of them are now in Athens. Their ornamentation is largely geometrical, but shows many foreign elements. The forms of the vases are those of the geometrical style, and the manner of painting with dark-brown varnish upon light "Dipylon-clay" belongs also to that style. The arrangement of the decoration is, however, no longer strictly geometrical, and the favorite animals of the old style, the horse, the stag, and the roe, are supplanted by Oriental figures. Lions, sphinxes, griffins, centaurs, and winged horses occur, as well as cocks, dogs, and hares. The water-birds are the only animal figures which retain their former prominence. In the ornament proper the old geometrical forms are also, in great measure, supplanted by new ones, among which lotos-flowers and divergent rays are prominent. The whole character of these vases seems to show that this style, which followed that of the "Dipylon-vases," is the result of Oriental influence upon the successors of the painters of the "Dipylon-vases." This influence came from some part of the Greek Orient, but the difference between these vases and those of Rhodian manufacture shows that the Rhodians were not the teachers of the Attic artists of the last part of the seventh century B. C., the period to which these vases belong.—MISCELLANIES. H. v. ROHDEN, *The Hermes of Praxiteles* (pl. 6). A wall-painting from Pompeii is published. It represents a youthful satyr holding a child upon his left arm, while in his raised right arm he holds a cluster of grapes toward which the child is stretching out its arms. The position is almost identical with that of the Hermes of Praxiteles, except that the figure stands without support and is, therefore, somewhat more erect than the Hermes. Even the mantle hanging from the left arm of the figure is retained, though the satyr wears a nebris. The kerykeion is, of course, wanting. This painting shows that the Hermes must originally have held a cluster of

grapes in his right hand.—F. STUDNICZKA, *Painted Tiles*. Those peculiar terracotta tiles shaped something like a thimble, from which about a third—parallel to the longitudinal axis—has been cut away, are discussed. They appear to have been used as coverings for the ridges of wooden roofs. Then the roofs must have been very small, since the closed end of these tiles would prevent their employment as a continuous covering for a long ridge. Studniczka suggests that they may have covered the peaks of wooden stelai.—E. LOEWY, *On Greek Artists' Inscriptions*. No. 477 and No. 487 in Loewy's *Inscripfen griechischer Bildhauer* are identical.—BIBLIOGRAPHY.

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MITTHEILUNGEN DES K. DEUTSCHEN ARCHÄOLOGISCHEN INSTITUTS. ATHENISCHE ABTHEILUNG. Vol. XI. No. 4.—W. DÖRFFELD, *The Ancient Temple of Athena on the Akropolis* (suppl. pl. A). The plate gives the plan of the building. For reconstruction and details see *Antike Denkmäler*, 1886, pls. I, II. This temple stood just south of the later Erechtheion, but extended much further toward the west. The portico of the Κόρα and part of the southern wall of the Erechtheion extend over the remains of the old temple. The temple was peripteral, with six columns on the ends and twelve on the sides. It had a pronaos at each end. The eastern cella was nearly square (10.50 by 10.65 met.), but was divided into three parts by two rows of columns. The western cella was somewhat shorter (6.20 by 10.65 met.) than the eastern, and had, apparently, no interior columns. Between the eastern and the western cellae were two smaller rooms, which together occupied the whole width of the building. It seems probable that they were entered from the west, but for what they were intended is as yet unknown. The temple was built upon a partly artificial terrace, as the ground upon which it stood was not naturally level. The length of the building, measured on the stylobate, was 43.44 met., and its width 21.34 met. Several parts of columns, epistyle, triglyphs, cornices, etc., have been found, which are attributed with certainty to this temple, and make a reconstruction of it possible. The foundations are of the hard bluish rock of the Akropolis and hard Peiraieus limestone, mixed with a little other material. The columns, epistyles, triglyphs and cornices were of Peiraieus stone, while the metopes, the entire roof and the pediment sculptures were of marble. The temple had but one step, not three. The Doric columns have 20 flutings, a wide capital with four rings, and four rings about the neck. The date assigned to the peripteros and the upper part of the building is the time of Peisistratos, but the cella and opisthodomos appear to be older.—F. STUDNICZKA, *Union of fragments in the Akropolis Museum* (pl. 9). 1. The beautiful archaic female head published in the Έφ. Έρχ., 1883 pl. 6, fits upon a draped torso in the Akropolis Mu-

seum. The drapery is finely done in the archaic manner. The colors with which it was adorned are now much faded, but green and red patterns are visible. The figure belongs to the type of which our knowledge has been especially increased by the discoveries of the past year in Delos and Athens. The date assigned is the end of the sixth century. 2. (pl. 9. 2.) In 1882 a female head was found, which belongs to a statuette long since discovered. The work is archaic, but shows much individuality. Colors were freely used in the adornment of this figure. 3. A torso, 0.70 met. high, has been put together by uniting three fragments, apparently Nos. 5084, 5022, 5019 of v. Sybel's catalogue. 4. Two fragments are united to form the figure of a scribe with an open diptychon upon his knee. The figure is clothed only in a himation. Red and green colors are used. Two similar figures were recognized by Furtwängler, *Mith.* vi, pl. 6, p. 175 ff. 5. This figure is published in pl. 9. 3. It is composed of seven fragments. It is much superior in execution to the preceding. 6. Furtwängler published in *Mith.* vi, pl. 1, 2, p. 20 ff., a torso of a boy, found in 1865-66, in digging for the foundations of the Akropolis museum, and fitted upon it a fine head found at the same time. It has been doubted whether these pieces belong together, but it is here proved that they do. 7. (pl. 9. 1.) A head in the Akropolis museum fits upon the unfinished torso, formerly in the Propylaia, which has been variously called Apollon with the lyre, and an athlete or charioteer. The head shows that the figure is a replica of the well-known Hermes tying his sandal.—J. BÖHLAU, *Perseus and the Graiai* (pl. 10). An Athenian pyxis formerly incorrectly interpreted (by Gaedechens, *Perseus bei den Nymphen*, Jena 1879) is here better published. It represents Perseus taking the eye of the Graiai by stealthily substituting his hand for that of one of the blind sisters. The Graiai are three in number. Besides the actors in this scene, Athena, Poseidon, Hermes, and Phorkys are represented.—E. PETERSEN, *Archaic figures of Nike* (pl. 11). Eight small bronzes in the Akropolis museum (three of these are published) and one in London represent a winged figure (Nike) in rapid motion. The figure is, in most cases, so supported by the drapery and a base, usually with Ionic volutes, that the feet are in the air. Fragments in the Akropolis museum of similar marble figures, of almost life size, are published (pl. 11 B, C). Nearly the whole of one of these figures is preserved. The oldest known figure of this kind is the old Delian one in Athens (pl. 11 A, after *Bull. de Corr. Hell.*, 1879, pl. 6). If the feet of this figure did not rest upon the base, the chief reason for refusing to connect it with the inscription of Mikkiades and Archermos falls to the ground. The column with the name of Archermos (Εφ. 'Αρχ., 1886, p. 133 f.) may have served as a pedestal for a figure of this kind, for figures of Nike were frequently set upon columns, though their employment as akroteria was also common.

—C. SCHUCHHARDT, *Kolophon, Notion, and Klaros*. The exact site of Kolophon has never before been determined. The writer undertook two journeys into the region where Kolophon was to be sought, the first in the company of H. Kiepert, the second in that of P. Wolters. Extensive remains of Hellenistic walls were found very near Tratscha and Dermendere, in the valley of the Arodschitschai. The extent of the ruins shows that a large city must once have stood there, and Kolophon is the only large city in that region. Four cuts of portions of the walls are given. They are regularly built, though the regularity of the layers of stone is sometimes interrupted by the employment of unusually large blocks. The wall was strengthened with semi-circular towers. A sepulchral inscription from Dermendere is published. Notion, the port of Kolophon was situated on a steep hill by the mouth of the Arodschitschai. A cut of part of the wall is given. The wall is for the most part Hellenistic, but was restored in Roman times. Besides the wall, remains of a *templum in antis* and of a nearly square auditorium, perhaps a dikasterion or bouleuterion, are described and cuts are given. A small theatre with only 27 rows of seats was found, the front walls of which are of Roman times. The nekropolis of Notion is of considerable extent. Eight inscriptions from sepulchral monuments are published, two of which are of considerable length. One of these marked the tomb of a priest of Apollon of Klaros. The sacred cave and oracle of Apollon seem to have been situated in a valley near Giaurkoï, where is an almost inaccessible cave with a pool of clear water. Not far from this cave (which agrees with the account of Tacitus, *Ann.*, II. 54), a Korinthian capital was found, apparently of Greek workmanship. The entire territory of Kolophon was studded with watch-towers. These are marked upon the map of the region which accompanies this article, as do also plans of Kolophon and Notion.—H. G. LOLLING and P. WOLTERS, *The Dome-Sepulchre at Dimini*. This tomb, about an hour's walk from Volo, has been excavated by the Greek Government. It resembles very closely the tomb at Menidi. The dromos is only about half the length of that at Menidi, but this is explained by the steepness of the hill at Dimini. In this tomb were found remains of bodies which had not been exposed to fire. This shows that simple burial, as well as cremation, was practised. Numerous objects of gold, glass, bone, bronze, and stone were found, nearly all of which are closely similar to objects found at Mykenai, Menidi, and Spata. The fragments of vases found in the tomb are of no particular interest.—MISCELLANIES. R. BOHN, *Tower of a Pergamene Country-town* (pl. 12). A tower of the Pergamene town described on p. 1 ff. is published. The outer walls are built of carefully squared blocks, and the space within was filled with loose material.—F. DÜMMLER, *Corrections to pp. 18, 20, 25*. The corrections concern the statements made,

on the pages referred to, regarding the stone of which certain objects are made.—H. SWOBODA, *On p. 115 N. 3.* The inscription, published by Dümmler, *l. c.*, is shown to belong to Syros, though it was found at Melos (cf. *C. I. G.*, 2347 c). *Náxis* or *τὰ Νάξια* was then a deme of Syros.—P. WOLTERS, *Κύλινδρος τετράγωνος*. This expression occurs in an inscription, *C. I. A.*, II, 2. 835, l. 70. Other cases are cited in which *κύλινδρος* seems to mean merely a long stone used for purposes of adornment.—F. STUDNICZKA, *On the Artist's Inscription of Atotos and Argeiadas*. The second part of this inscription (Loewy, No. 30 d, e with appendix p. xviii), *κ' Ἀργειάδας Ἀγελάϊδα τ' Ἀργείων* is explained by assuming that Agelaidas had been endowed with the citizenship of Argos, while Argeiadas had only the citizenship of Sikyon.—H. G. LOLLING, *Metrical Inscriptions in Larissa*. Two metrical inscriptions are published. One is archaic, with digamma of the form *Ϝ*; the other is very late.—**DISCOVERIES and LITERATURE.**

HAROLD N. FOWLER.

**REVUE ARCHÉOLOGIQUE. 1887. March-April.**—HIPPOLYTE BAZIN, *The Roman theatre of Antibes*. From very scanty remains of the substructure, M. Bazin is able to draw a plan of the Roman theatre at Antibes (pl. v), correcting the plan given in the *Antiquitez historiques de la ville d'Antibes*, a ms. of the year 1708, by Jean Arazi. According to the new observations, the *cavea* was divided into *summa* and *ima cavea*, and would seat about 3,500 people. The dimensions of the *proscenium* and the line of the *scena* have also been determined. The remains of the theatre were demolished, in 1691, to supply materials for fortification.—L. DE LAIGUE, *An inedited portrait of Macchiavelli*. In the possession of Count Bentivoglio is a life-size terracotta bust of Macchiavelli (pl. vi). Its authenticity is supported by an engraving in the ms. records of the Picci family, taken from an original portrait by Santi di Tito. This determines the marble bust in the Bargello, Firenze, to be unauthentic.—GERMAIN BAPST, *Tomb and Reliquary of Saint Germain*. Saint Germain died in 576 A. D. and was buried in the church of Saint-Germain-le-Doré, Paris. His tomb was decorated, perhaps designed, by Saint Éloi about 635 A. D. There were two reliquaries of Saint Germain: one was made under the abbot Eble, at the end of the ninth century; the second was made, under the abbot Guillaume, in 1408, and was enriched with a large number of precious stones. A reconstruction of this reliquary is given in Plate VII. The tradition ascribing the reliquary to Saint Éloi is shown to be baseless.—*Tomb of Sainte Colombe*. It appears that Saint Éloi constructed or decorated the tomb of Sainte Colombe at Sens, and afterwards deposited the relics of the saint in a chapel erected in her honor in Paris. The reliquary is of later date, and was probably made under Archbishop Wenilon in 853 A. D.—*Tomb*

of *Saint Séverin*. Saint Séverin, abbot of Agaune, died Feb. 11, 507. Childebert erected in his honor a tomb and a church, which became the Abbey of Saint-Séverin. In the following century, Saint Éloi erected and decorated a new tomb. The reliquary, referred to Saint Éloi, was probably of later date.—BARON LUDOVIC DE VAUX, *Recent discoveries at Jerusalem. Present condition of the excavations on the site of the Pool of Bethesda*. The excavations made by Mauss in 1865–1876, revealing a monastic chapel on the site of the Pool of Bethesda, have been continued by the missionaries of Algiers. Four cuts are given, showing the topography of the north-east portion of Jerusalem, and the advances made in the excavations on this site. The lateral porch with steps leading down into the five chambers of the crypt, and the mouth of a small channel cut in the rock, appear to identify the spot with the account in *John*, v. 2–7, though the identification is not thoroughly conclusive.—EUGÈNE MÜNTZ, *Ancient Monuments of Rome at the time of the Renaissance. New Researches* (end). Documentary evidence of the xv and xvi centuries is here presented, concerning the Capitol, Arch of Constantine, Arch near the Palace of Saint Mark, the Forum Boarium, the Tower of Nona and the Fountain of Trevi.—*Notes on a collection of xv-century sketches representing the principal monuments of Rome*. The library of the Escorial, in Madrid, contains an important collection of xv-century pen-sketches of Roman monuments. This collection, quite unknown to archaeologists, contains sketches of architectural, sculptural, and other ancient Roman monuments.—M. DELOCHE, *Studies on some seals and rings of the Merovingian period* (cont.). xxxiv. Seal-ring of Diana. Besides the monogram, which is easily decipherable as DIANE, this ring contains, twice, the sign S, indisputably the sign for *Signum* or *Signillum*. This ring, in the possession of M. Alfred Danicourt, is the clearest instance known of the use of this abbreviation. xxxv. Explanation of seal-inscriptions engraved on two rings previously described. Under the heading xiv and xv were described two rings, one of which was read BENIGNVS; the other, which contains only the letter S, was left undeciphered. In the light of the seal-ring of Diana, the first of these rings may be read *Signum* BENIGNI; or, as both rings were found together in the same tomb, we may retain the reading BENIGNVS for the one, and read *Signavi* or *Subscripsi* for the other. The latter [somewhat hazardous] explanation presumes that one ring was used for ordinary correspondence, and both for official documents. xxxvi. Ring in the Museum of Montpellier with the fish-symbol. On the central bezil is engraved the early Christian symbol, the fish; on either side is carved the chrysalis, emblem of the resurrection. The ring was found near the village of Montbazin (Hérault), and is a new proof of the persistence, in the provinces, of symbols no longer used in Rome. xxxvii. Another ring with the fish-

symbol, attributed to Saint Arnoul, Bishop of Metz. For the reason given in the preceding case, there is no chronological difficulty in the legend which attributes this ring to Saint Arnoul, who was Bishop of Metz from 614 to 626. xxxviii. Ring with the symbol of the dove of the ark. This ring is known, only by description, from a paper by M. de Longperier, as a Merovingian gold ring, on which was figured a dove carrying a branch. About the dove are engraved the words SALBA ME (*Salva me*). xxxix. On the dove, as an emblem of Christ. Interpretation of this symbol on three rings previously described. On the basis of a passage from the poet Ennodius Magnus (d. 521), the dove is [quite uncritically] taken as an emblem of Christ, and this interpretation given to the appearance of the dove in rings Nos. iii, vi, and xxxi.—PAUL MONCEAUX, *Note on a Proconsul of Africa, the poet Avienus*. It has been generally admitted that the poet Rufus Festus Avienus governed Africa in the year 366–67. In the *Fastes de la province romaine d'Afrique*, 1885, by Charles Tissot, the poet's name does not appear. Evidence, however, may be adduced, from the poetry and life of Avienus, that he was once proconsul of Africa, although in the year 366–67 the post of proconsul was occupied by Julius Festus Hymetius. The date of the proconsulship of Avienus cannot be determined exactly, but there is some reason to believe that it was one of the following years, 355, 356, 358 or 362.—NEROUTSOS-BEY, *Greek and Latin inscriptions collected in and about Alexandria*. Publication is here made of eleven Greek inscriptions, acquired since 1878, from the western nekropolis and the ancient city. Inscriptions from the eastern nekropolis and the townships Eleusis and Nikopolis will be published later.—JACQUES GUILLEMAUD, *Gallie inscriptions. A new attempt at interpretation*. After some prefatory remarks on the work of his predecessors, M. Guillemaud begins his treatise on Gallie inscriptions with a consideration of the bilingual inscription of Todi, finding the following correspondence between the Gallie and Latin words:

Face A: ATEKNATI TRUTIKNI KARNITU LOKAN KOISIS TRUTIKNOS.  
*Ategnati Druti filii tumulum locavit Koisis Druti filius.*

Face B: ATEKNATI TRUTIKNI KARNITU ARTUA KOISIS TRUTIKNOS.  
*Ategnati Druti filii tumulum statuit Koisis Druti filius.*

His interpretation differs from that of Pictet and of Stokes, both of whom make KARNITU the governing verb. The Latin portion of the inscription contains the phrase *Frater ejus minimus* in apposition to *Koisis*. Supposing this notion to be contained in the Gallie words, we obtain the following glossary: ATEKNATOS, *eldest*: KNATOS, *child*: KNOS, *son*: KARNITU, *tomb*: LOKAN, *he placed*: KOISIS, *youngest son*: ARTUA, *he constructed*.—MISCELLANIES. *Monthly Bulletin of the Academy of Inscriptions*.—Archaeological news and correspondence.—Bibliography.

**May-June.**—LÉON-HEUZEY, *A Chaldean textile*. In an ancient textile from an Egyptian tomb, M. Heuzey recognizes a material similar to that figured upon Chaldean monuments (pl. VIII-IX). The horizontal parallel lines on the figured garments are no longer to be interpreted as flounces, nor the vertical lines as pleats; but we are to see in these the representation of a textile which has threads in parallel lines projecting from the body of the cloth. This textile with its fleece-like surface is still made in the East. It was known to the Greeks as *καννάκης* (Aristoph., *Wasps*, l. 1056-1131), made not only in Babylon, but also at Ecbatana, and exported from Asia Minor to Greece. Several varieties may be traced on Babylonian and Assyrian and Hittite monuments. Of like character appears to have been the *undulata vestis* which Tanaquil made for King Servius.—ROBERT MOWAT, *Oscan inscriptions ornamented with images of coins*. Several small terracotta stelæ from Capua contain Oscan inscriptions and are ornamented with copies of coins. One of these, in the British Museum, is given in phototype (pl. x). It contains an image of the head of Minerva, resembling that on the *as libralis*; also the figure of a wild boar, like that on the *quincussis*; below is a portion of an Oscan inscription. These stelæ apparently commemorate votive offerings of money.—M. DELOCHE, *Studies on some seals and rings of the Merovingian period* (cont.). XL. Seal-ring from Saint-Pierre (Ardèche). This is a gold ring found at Saint-Pierre. On the bezil is engraved a head and the inscription + NON. The name *Nona* or *Nonna* was borne by several saints in the period from the IV to the VII century. XLI. Ring with a gold coin as a bezil. The coin imitates a Byzantine coin, and bears on it a figure of Winged Victory and a circular inscription: VICTVRIA AC . . . TORVN, a corruption of VICTORIA AVGVSTORVM. Below the figure of Victory is inscribed CONOB. XLII. Seal-ring of Ragnethramnus. This is a gold ring found at Blois. The inscription has been incorrectly read RAC-NETHRAMNVS for RAGNETHRAMNVS.—NEROUTSOS-BEY, *Greek and Latin inscriptions collected in and about Alexandria* (cont.). Here are published twenty Greek inscriptions from the Eastern nekropolis. They belong to the Ptolemaic period and commemorate foreigners of the military class, Greek mercenaries, Kretans, Thrakians and Galatians. This was apparently the burial-ground for that portion of the army which was garrisoned to the east of Alexandria.—JACQUES GUILLEMAUD, *Galic inscriptions. A new attempt at interpretation* (cont.). A careful reconsideration of the Gallic inscription of Briona (district of Novara, Italy) leads to the following translation: "Having been led in captivity afar off, the sons of Tanotalos, Quitos, Lekatos, Anokopokios and Setupokios, having been put to death, Tanotalos (their father) has publicly honored them by (erecting their) tombs."—EDMOND LE BLANT, *The robbery of relics*. As

early as the year 386 a decree was made in Constantinople against the disturbance and sale of martyrs' bones. A number of instances of the robbery of relics in succeeding centuries are described.—AUG. PROST, *Early Christian Sarcophagi in Gaul*. Many churches and several museums, especially in the towns of central France, contain early Christian sarcophagi of which no general study has been made. The works of M. Edmond Le Blant on the Christian Sarcophagi of Gaul show that, with the exception of that of La Gayolle, these sarcophagi do not antedate the IV century. The form and decoration of the earliest Christian sarcophagi were derived from pagan sources. Gradually, subjects from the Old and New Testaments were substituted. M. Le Blant has established the fact that the order and selection of the subjects on a large number of sarcophagi are taken from ancient funeral liturgies.—*Excavations of M. Virot at Mantoche*. These excavations have brought to light various objects of the Gallo-Roman period. Illustrations are given of several pieces of glass and pottery.—ANDRÉ LEVAL, *Inscription at Constantinople*. The inscription is found on a small gateway of the old town-wall near the church of SS. Sergios and Bacchos. It consists of a combination of Old Testament passages, with slight verbal and orthographic variations. It dates from the VI century.—MISCELLANIES. *Monthly Bulletin of the Academy of Inscriptions*.—*National Society of Antiquaries of France*.—*Archæological News and Correspondence*.—*Bibliography*.

ALLAN MARQUAND.

## BOOKS RECEIVED.

**M. de Clercq.** Collection De Clercq. Catalogue méthodique et raisonné: Antiquités Assyriennes: Cylindres orientaux, cachets, briques, bronzes, bas-reliefs, etc. Publiés par M. DE CLERCQ avec la collaboration de M. J. MÉNANT. Troisième livr. 1<sup>re</sup> fasc.: feuilles doubles 16 à 22. Folio: texte pp. 115-170; planches XXIII à XXIX. 1885, Paris, Ernest Leroux, éditeur; francs 10.

**ΔΙΔΑΧΗ ΤΩΝ ΑΠΟΚΤΟΛΩΝ:** The Teaching of the Apostles, newly edited, with facsimile text and a commentary, from the MS. of the Holy Sepulchre (convent of the Greek Church), Jerusalem, by J. RENDEL HARRIS, for the Johns Hopkins University, Baltimore. 4to, pp. vi + 107; facsimile plates i-x. 1887, Baltimore, Publication Agency of the Johns Hopkins University; London, C. J. Clay & Sons.

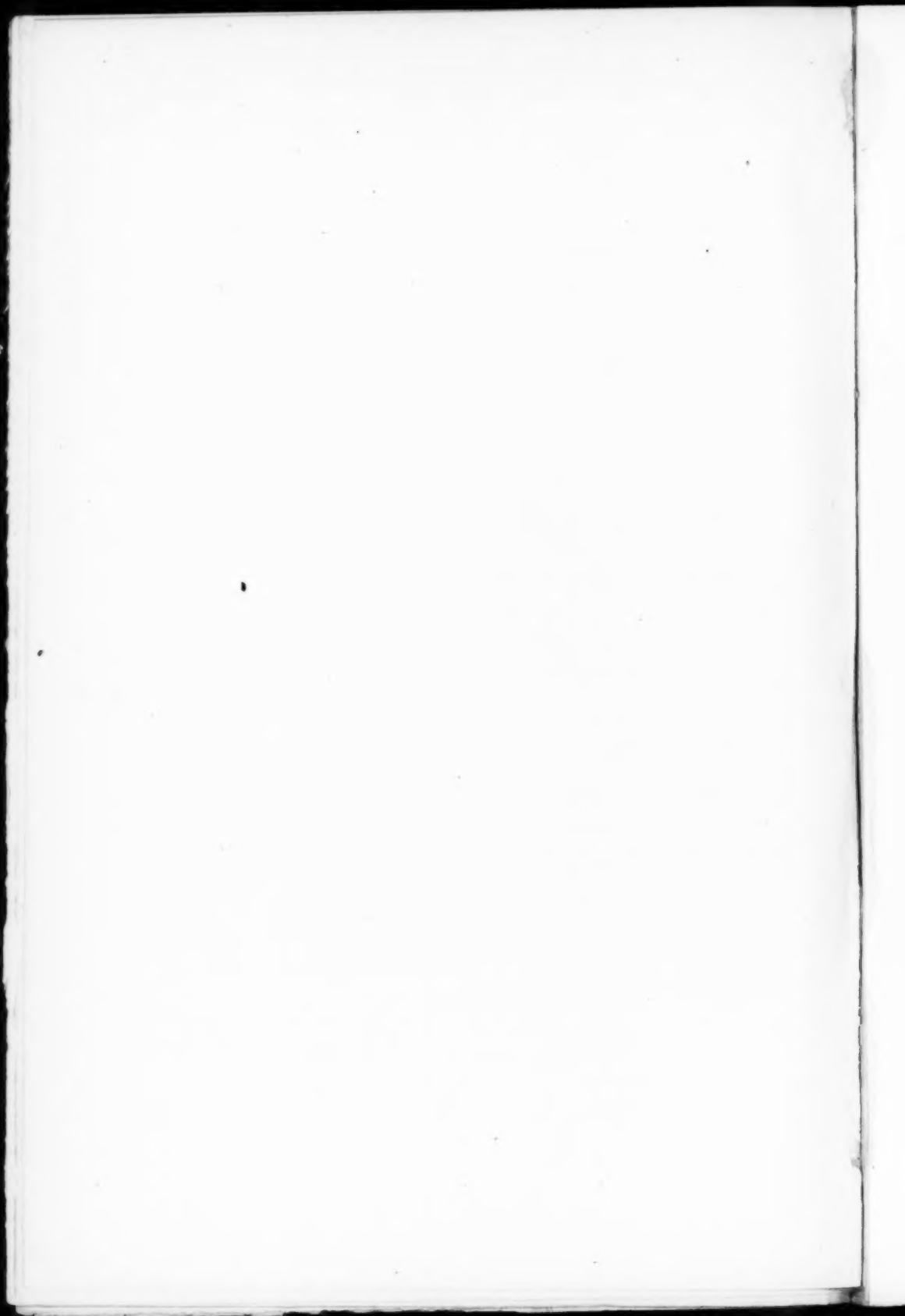
**Barclay V. Head.** Catalogue of Greek Coins. Attica—Megaris—Aegina. [Vol. XI of *A Catalogue of the Greek Coins in the British Museum*, edited by REGINALD STUART POOLE, LL. D.] 8vo, pp. LXIX + 174; autotype plates i-xxvi. Printed by order of the Trustees, London, 1888. Longmans; Quaritch; Asher; Trübner; Rollin & Feuarden.

**ΚΑΤΑΛΟΓΟΣ ΤΩΝ ΒΙΒΑΙΩΝ ΤΗΣ ΕΘΝΙΚΗΣ ΒΙΒΛΙΟΘΗΚΗΣ ΤΗΣ ΕΛΛΑΔΟΣ. ΤΜΗΜΑ Β'. ΕΛΛΗΝΙΚΗ ΦΙΛΟΛΟΓΙΑ. ΕΝ ΑΘΗΝΑΙΣ, ΕΚ ΤΟΥ ΤΥΠΟΓΡΑΦΕΙΟΥ ΤΟΥ ΚΑΛΑΟΥΣ.** 1884. 4to, pp. 300.

**Vito la Mantia.** Cenni Storici su le fonti del diritto Greco-Romano e le assise e leggi dei re di Sicilia. 8vo, pp. 136. Torino, 1887, E. Loescher; lire 3.

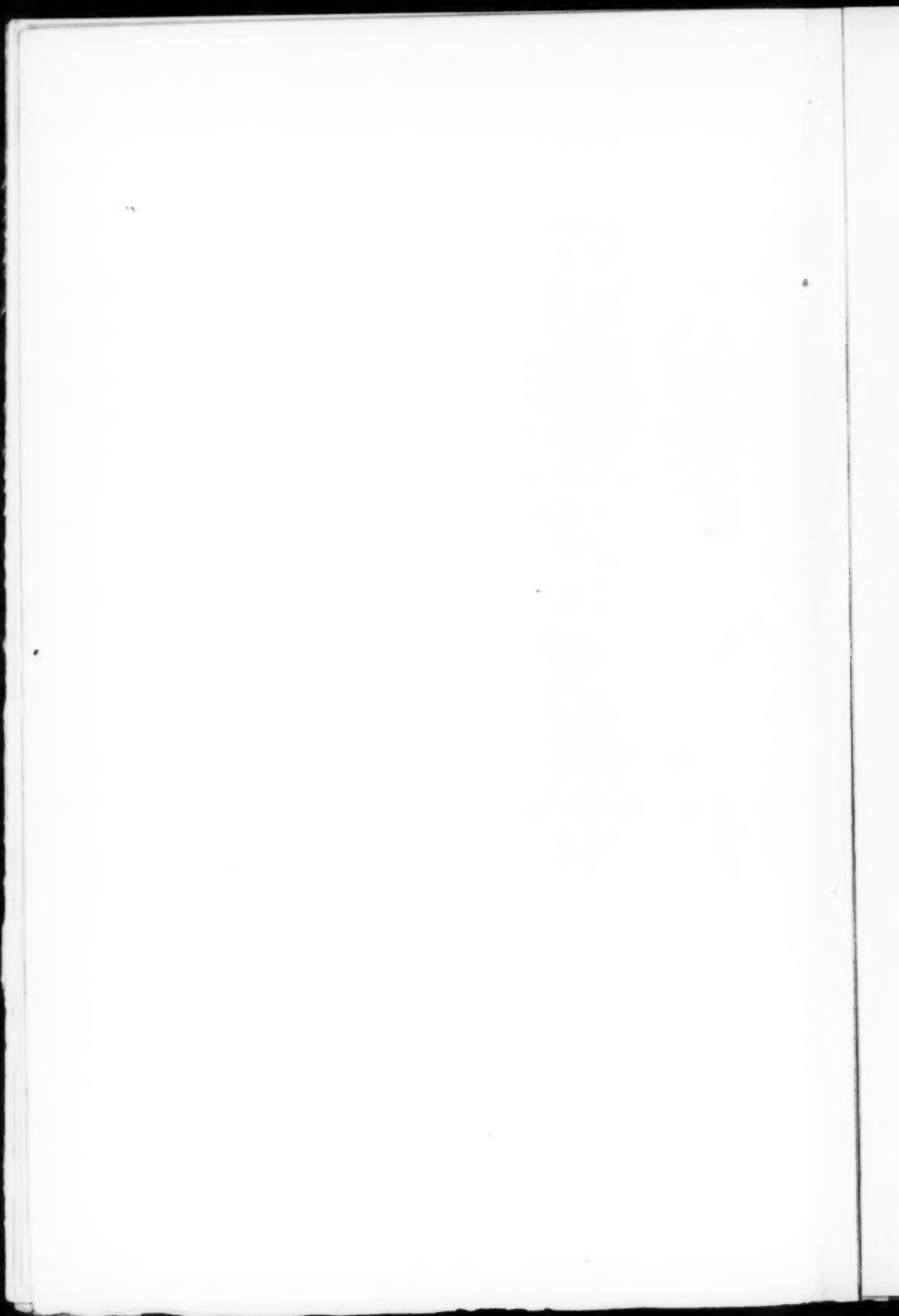
**E. S. Roberts.** An Introduction to Greek Epigraphy. Part I: the Archaic Inscriptions and the Greek Alphabet. 8vo, pp. XXI + 419. Edited for the Syndics of the University Press, Cambridge: 1887.

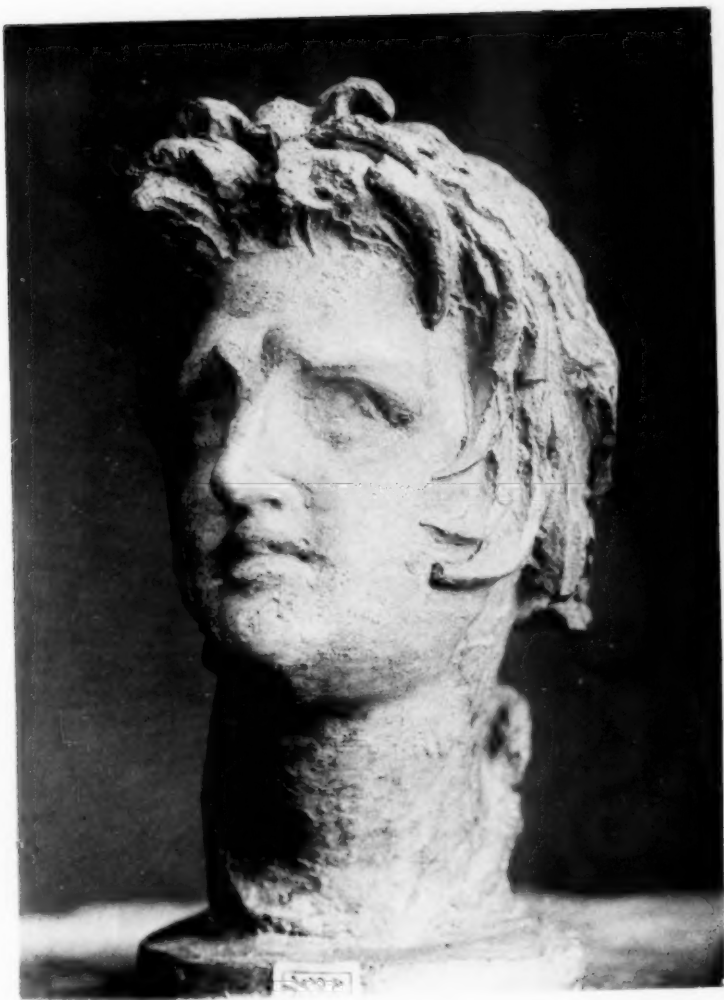
**Ph. Sophoulis.** Les Musées d'Athènes en reproduction phototypique de Rhomaidès frères. Publication de C. Rhomaidès. Fouilles de l'Acropole: 2<sup>e</sup> Livr. 4to, descriptive text, pp. 11; and 8 phototype plates ix-xvi: Athens, Karl Wilberg; New York, F. W. Christern: francs 7.50.



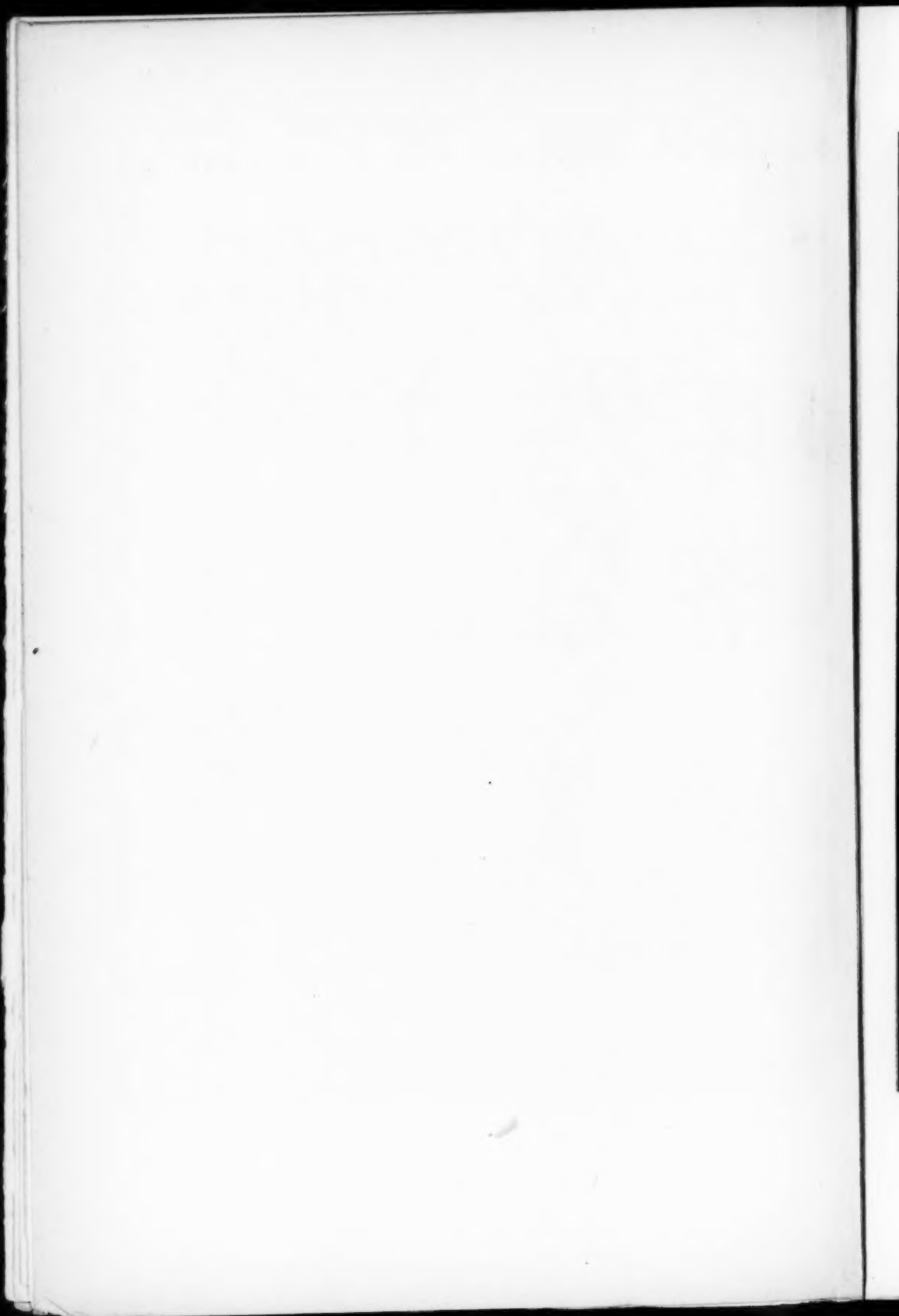


TERRACOTTA HEAD OF ALEXANDER THE GREAT,  
IN THE ROYAL ANTIQUARIUM AT MUNICH.





TERRACOTTA HEAD OF ALEXANDER THE GREAT,  
IN THE ROYAL ANTIQUARIUM AT MUNICH.

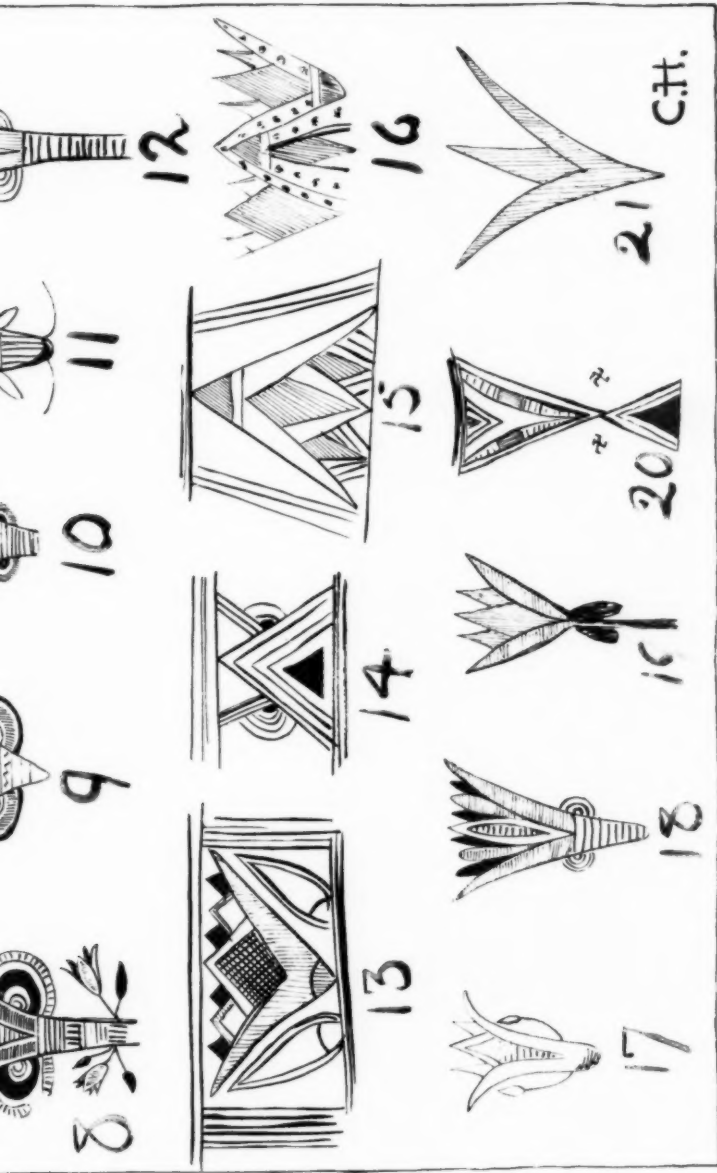




PAINTED SEPULCHRAL STELE FROM ALEXANDRIA,  
IN THE COLLECTION OF E. E. FARMAN.

Lotus Designs on Cypriote Vases. Plate I.





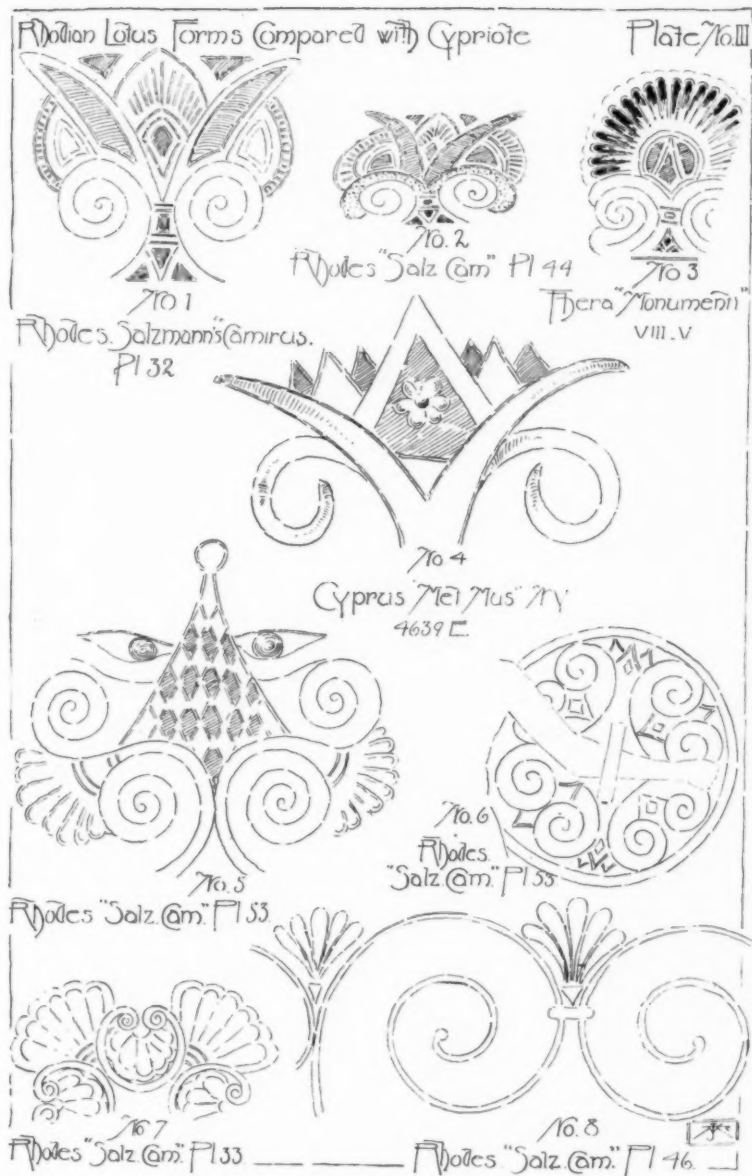
LOTUS DESIGNS ON KYPRIOTE VASES.





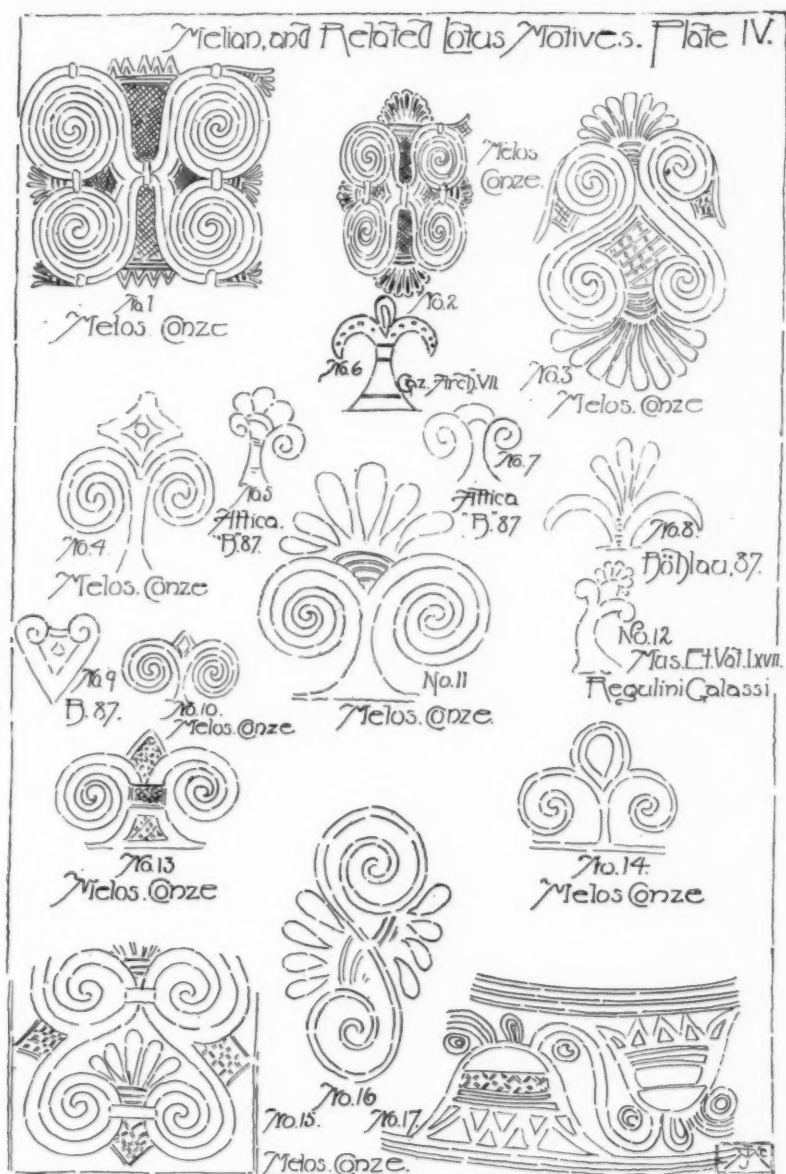
PROTO-IONIC STELES AND CAPITALS.





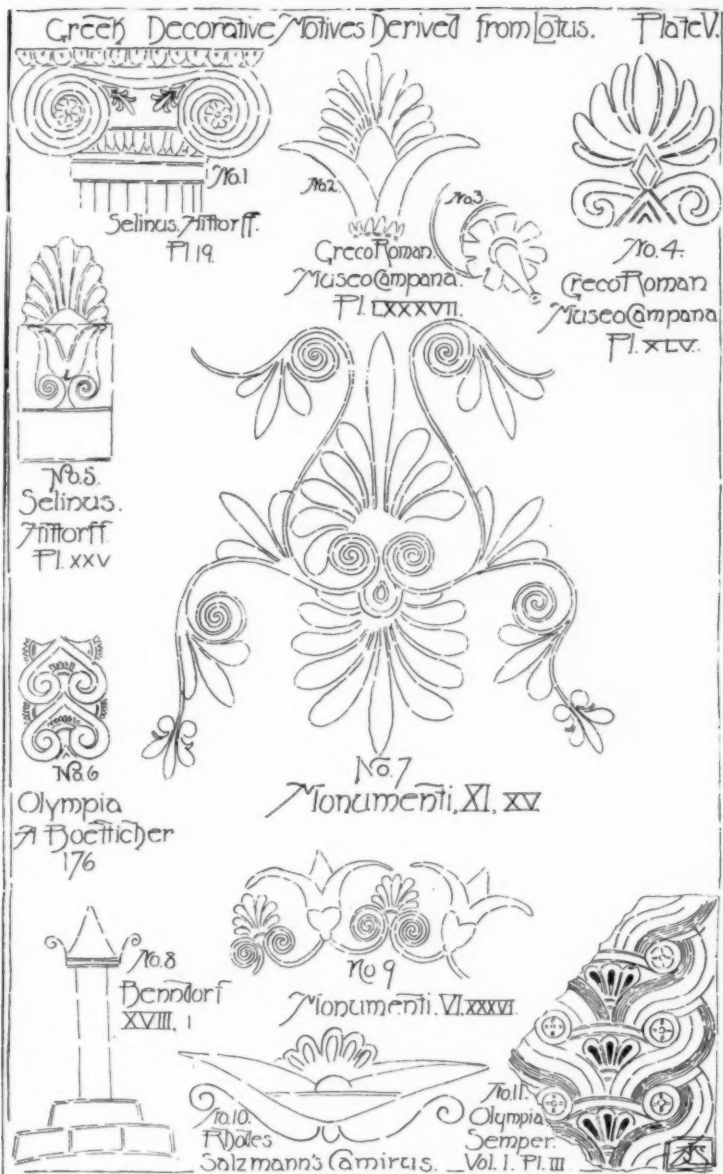
RHODIAN LOTUS FORMS COMPARED WITH KYPRIOTE.



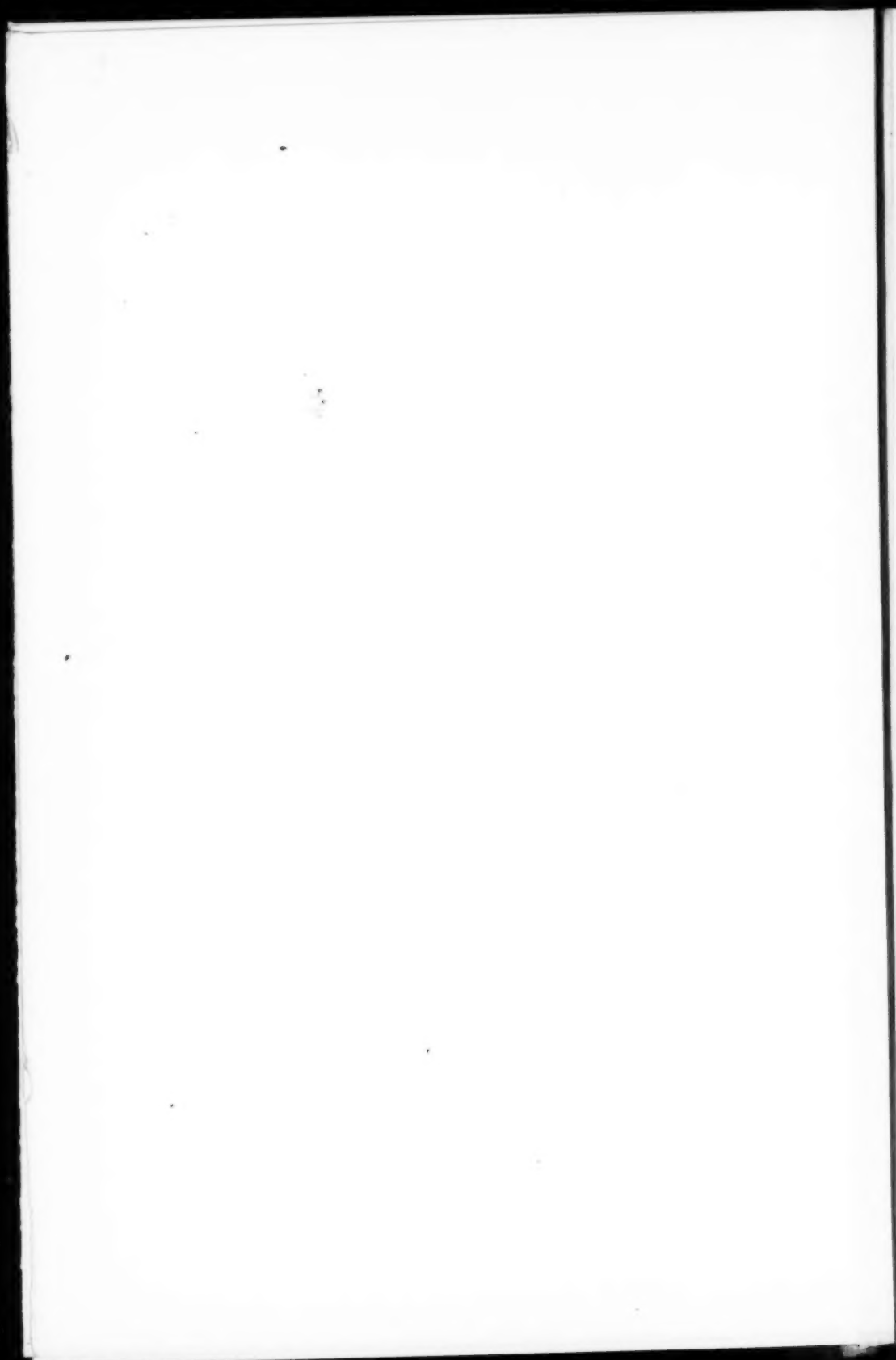


MELIAN AND RELATED LOTUS MOTIVES.

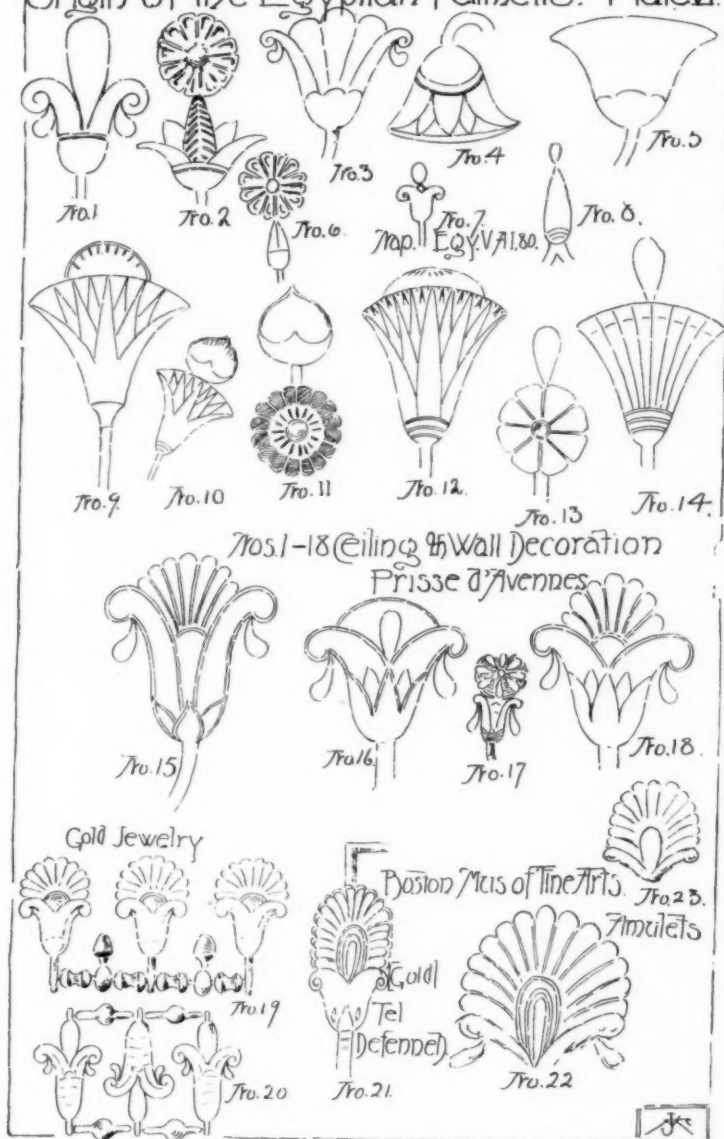




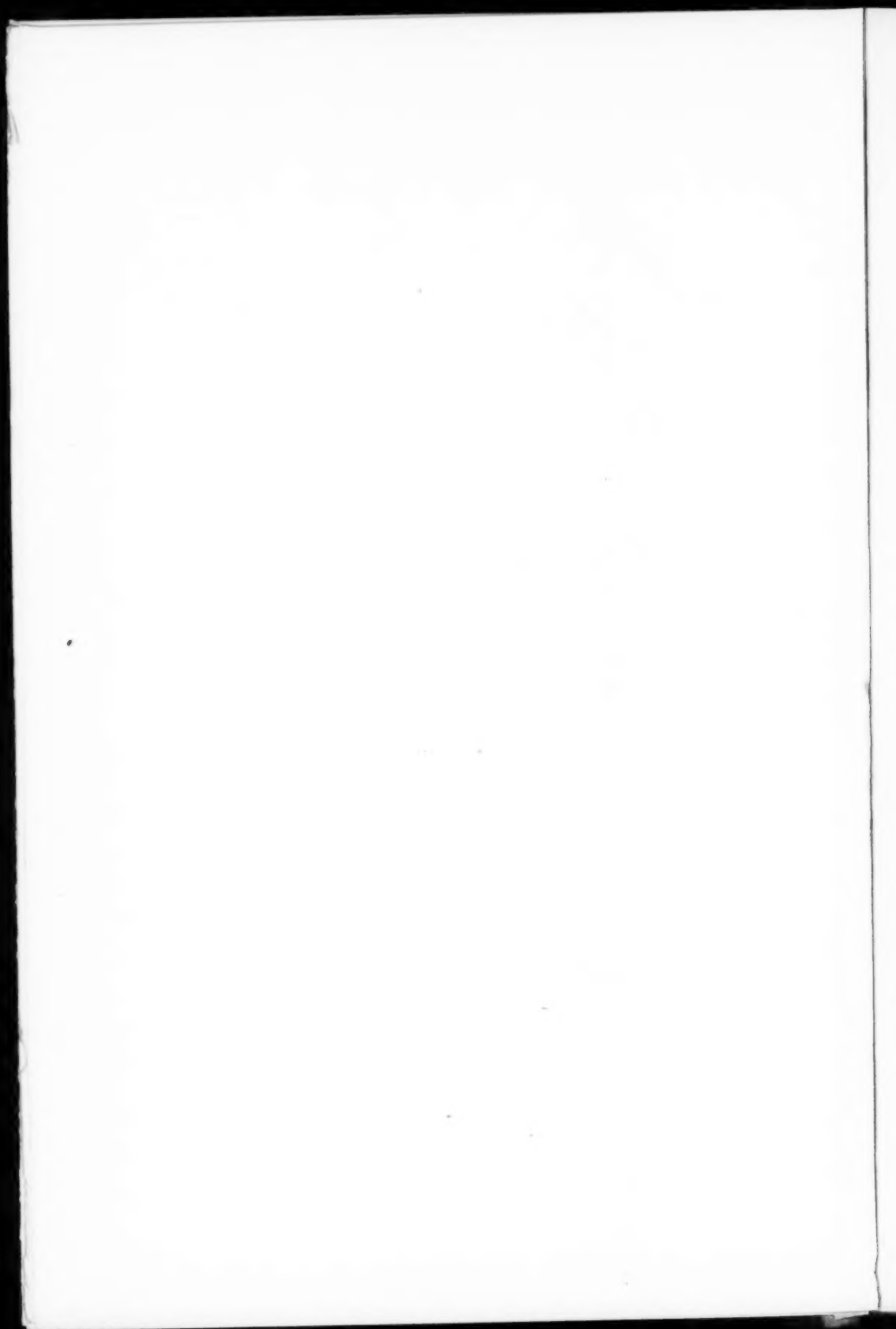
GREEK MOTIVES DERIVED FROM THE LOTUS.



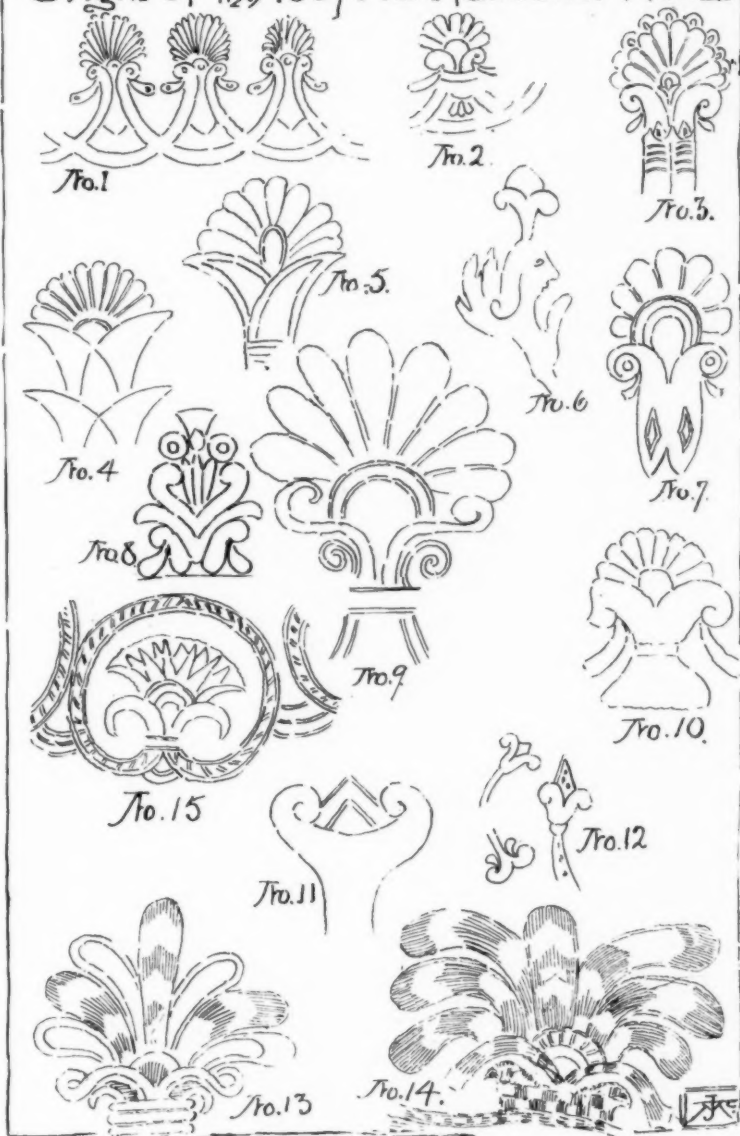
## Origin of the Egyptian Palmette. Plate VI.



ORIGIN OF THE EGYPTIAN PALMETTE.



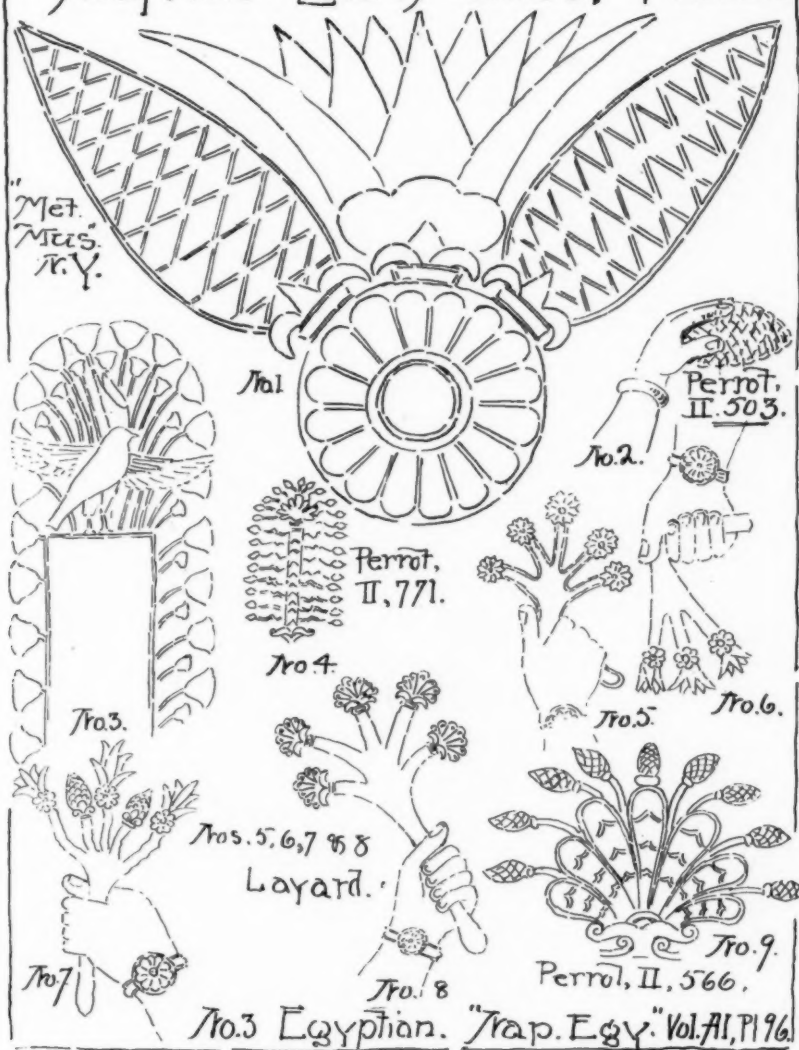
## Origin of the Assyrian Palmette. Plate VII



THE ASSYRIAN PALMETTE

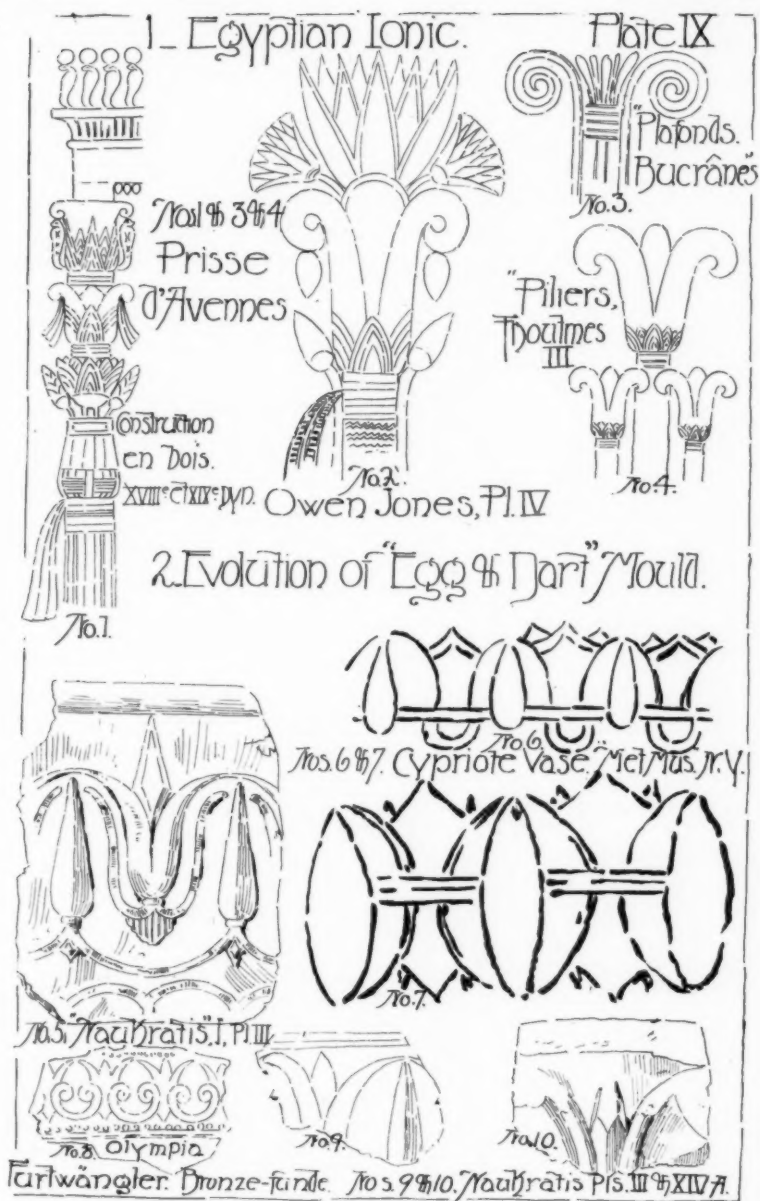


Assyrian Lotus Motives, Plate VIII



ASSYRIAN LOTUS MOTIVES.





EGYPTIAN IONIC.





EGYPTIAN, MYKENAIAAN, AND KYPRIOTE LOTUS MOTIVES.

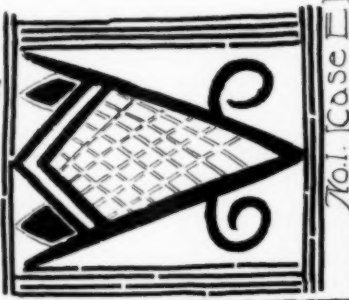


## Greco-Phœn Reminiscent Lotus Motives. Plate XI

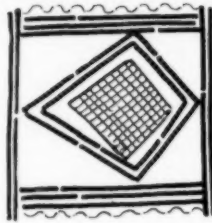


GRECO-PHOENICIAN REMINISCENT LOTUS MOTIVES.

Geometric Patterns on Cypriote Vases "Met Mus." Plate VII



No. 1. [Case E]



No. 2. [Case 25,  
3545]



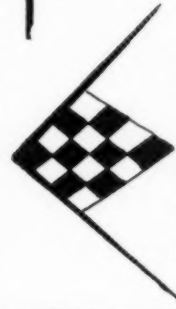
No. 3. [Case 3]



No. 4. [Case D, 3744]



No. 5. [Case E]



No. 6. [Case 32,  
3421]



No. 7. [Case 30, 4762]



No. 8. [Case 30, 4643]

No. 6. [Case 32,  
3421]



No. 7. [Case 30, 4762]

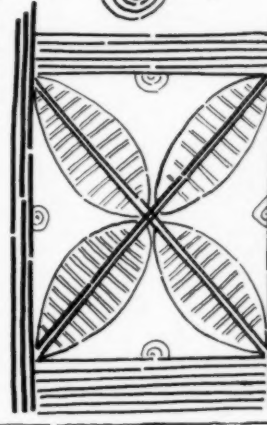


No. 8. [Case 30, 4643]

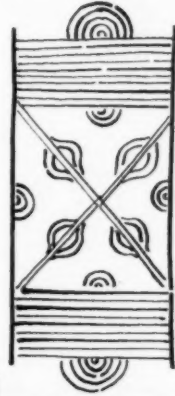


No. 9. [Case 32,  
4853]

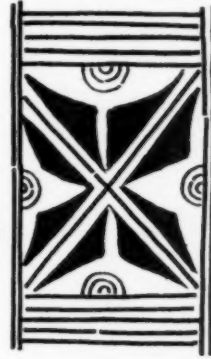
No. 10. [Case 30, 4646]



No. 12. [Case E, 4641]



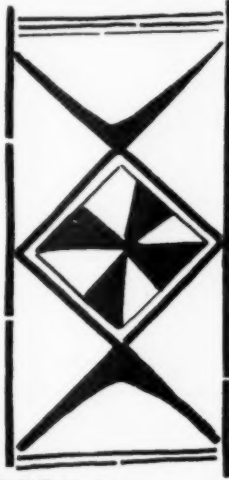
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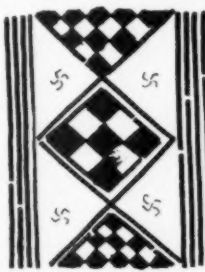
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No. 15. [Case 33, 3236]



No. 16. [Case 9, 4025]



No. 17. [Case 31,  
4847]

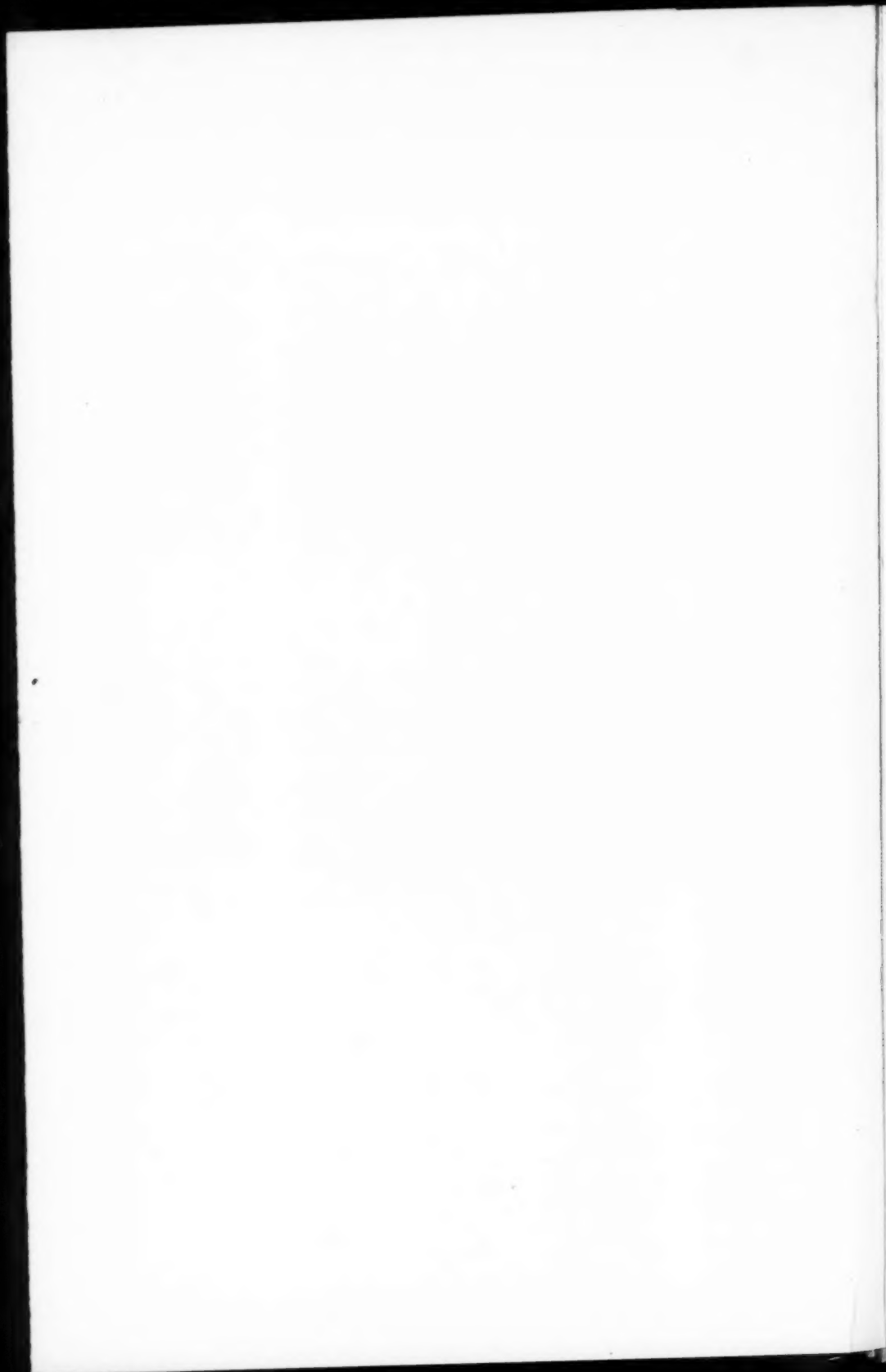


SILVER PATĒRA FROM KOURION; METROPC

I.

VOL. III. PL. XXX.





A

9



B

10

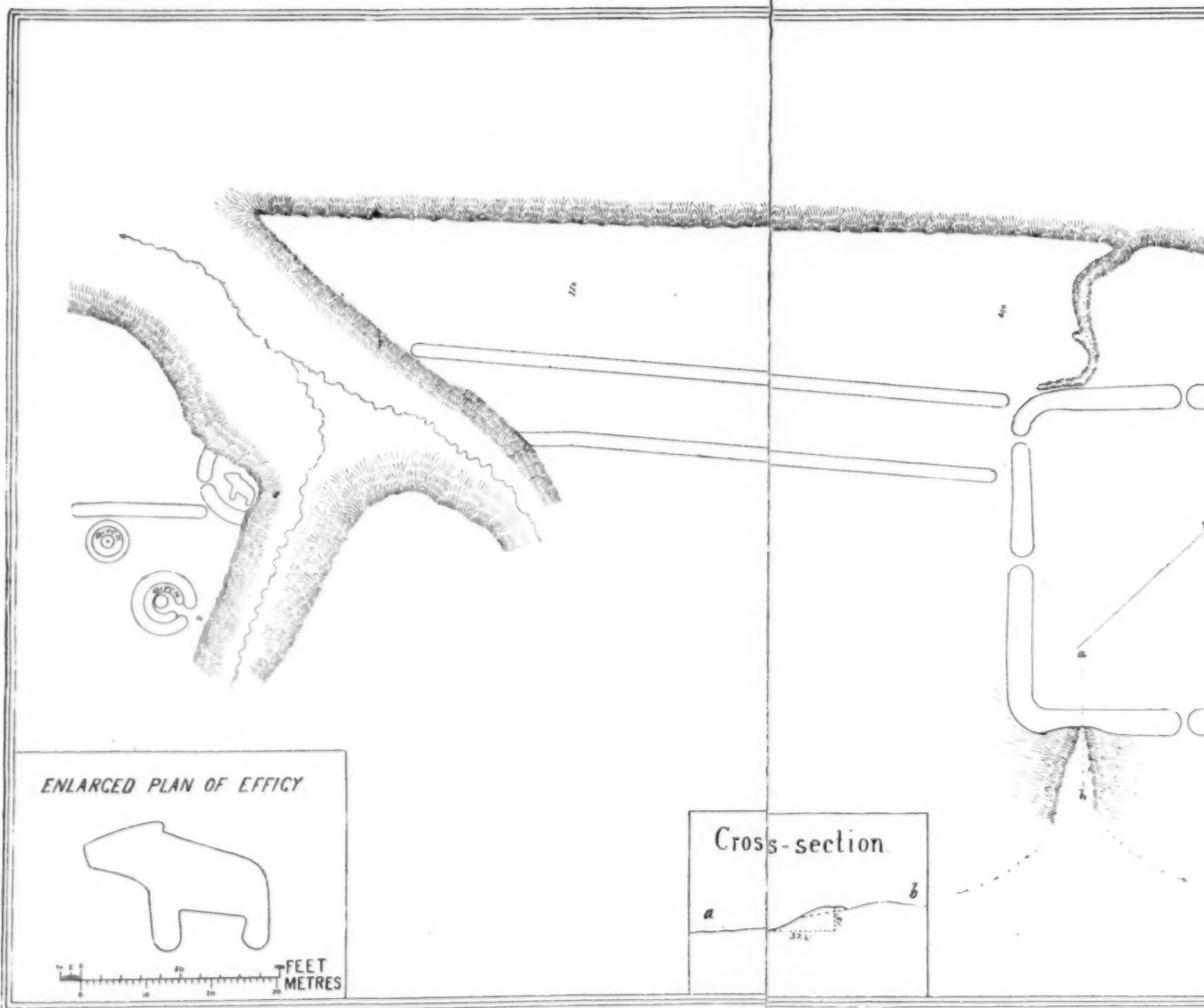


FORMSTEIN DES TURINER MUSEUMS.

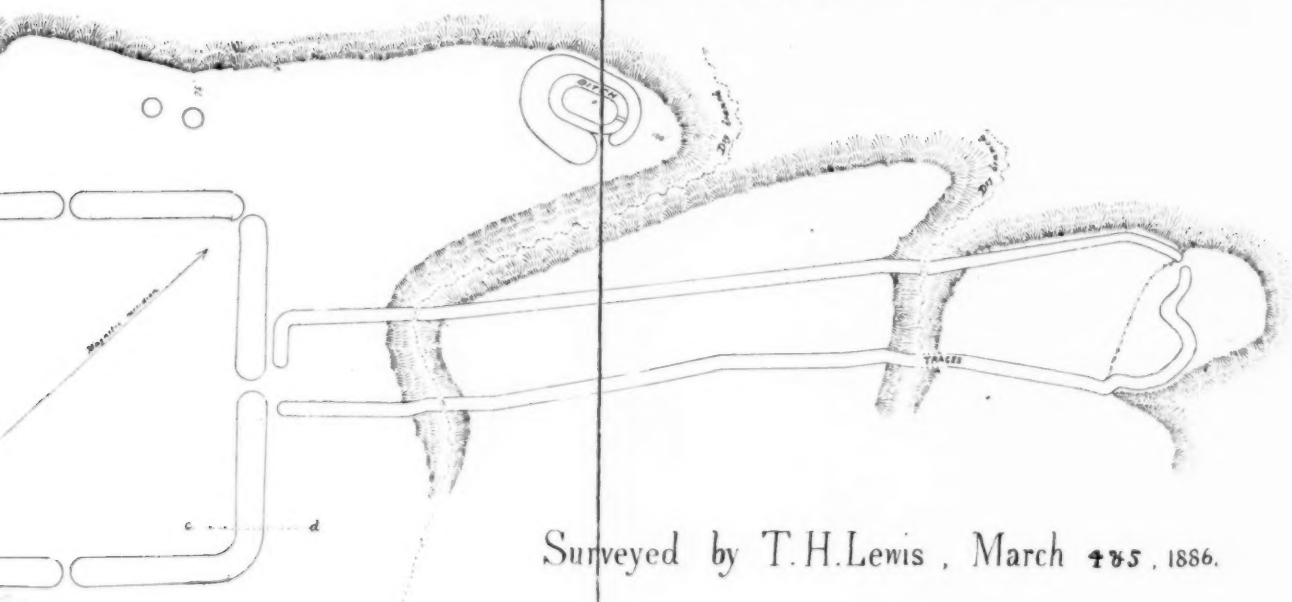




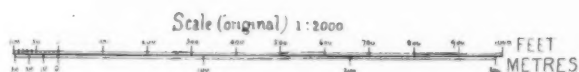
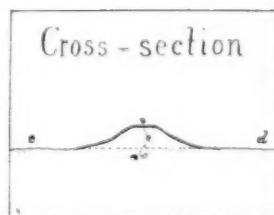
RELIEF IM MUSEO CIVICO ZU BOLOGNA.



# THE "OLD FORT" &c. IN GREENUP CO KY.



Surveyed by T.H.Lewis , March 1855 , 1886.



Drawn by A.J.Hill.

